Curriculum Vitae
4th April 2024

Anthony G Cohn, FREng, CEng, CITP, FAAAI, FEurAI, FAISB, FAAIA, FIET, FBCS

School of Computing
University of Leeds
Leeds LS2 9JT
England
Tel: (0113) 343 5482
a.g.cohn@leeds.ac.uk

Education:

1958-1964: Chesham Preparatory School, Bucks.

1964-1972: Dr Challoner's Grammar School, Amersham, Bucks.

1972-1975: University of Essex

BSc hons (1st Class) in Computing Science

1976-1979: University of Essex

SRC supported postgraduate student
PhD in Computer Science awarded July 1983:
Mechanising a Particularly Expressive Many Sorted Logic

British Computer Society

Chartered Information Technology Professional (CITP), 2005
Chartered Engineer (CEng), 2015

Career:

1975-1976: Systems Programmer
Chelmsford Computer Centre, Marconi Research Labs, Great Baddow, Essex

1979-1989: Lecturer in Computer Science, University of Warwick
1990 - 1993: Senior Lecturer, School of Computer Studies, University of Leeds
1993 - 1996: Reader in Automated Reasoning, School of Computer Studies, Univ. of Leeds
1996 - *present*: Professor of Automated Reasoning, School of Computing, Univ. of Leeds.
    1995 - 1999 Director of Research, School of Computing
    1999 - 2004 Head of School of Computing
    2009 - 2016 Director of Institute of Artificial Intelligence and Biological systems

2016- 2022: Director of Research and Innovation, School of Computing
2012 - 2014: Honorary Adjunct Professor, University of Technology Sydney
2018 - 2023: Fellow and Alan Turing Institute, UK
2017 - *present*: Distinguished Visiting Professor, Tongji University, Shanghai.
2018 - 2021: High End Expert, Tongji University, Shanghai.
2020-2022: Adjunct Professor, Shandong University, Jinan
2019-2022: Distinguished Visiting Professor, Qingdao University of Science and Technology, Shandong.

Research Grants:

SERC £56,283, 1.8.84 - 30.7.86, *Very Expressive Many Sorted Inference Systems*, Sole Investigator: A G Cohn

(Industrial source undisclosed) £83,300, 1.10.84 - 30.9.86, *Expert Systems for Tooling Design*, Investigators: A G Cohn & J R Thomas

SERC £62,636 (plus £42,200 centrally purchased equipment), 3.11.86 - 2.11.89, *Exploring Many Sorted Logic*, Sole Investigator: A G Cohn

SERC £123,565, 1.10.89 - 30.9.92, *Representation and Inference in a Naive Physics Theory of Space and Time*, Sole Investigator: A G Cohn

SERC £4,499, 1.7.90 - 30.9.91
Many Sorted Unification: Visiting Fellowship for Prof A M Frisch, Beckman Inst. Univ of Illinois at Urbana Champaign, USA, Sole Investigator: A G Cohn

SERC £2650, 1.8.92 - 31.7.93, *Many Sorted Equation Solving: Visiting Fellowship for Prof A M Frisch, Beckman Inst. Univ of Illinois at Urbana Champaign, USA*, Sole Investigator: A G Cohn

EPSRC £231,550, 29.3.93 - 28.9.96, *Logical and Computational Aspects of Space and Time*, Sole Investigator: A G Cohn

EPSRC £159,792, 14.10.92 - 13.1.96, *Declarative Extensions of Logic Programming*, Sole Investigator: A G Cohn,

CEC (ESPRIT Basic Research Project) ECU 1,550,000 (Leeds' share: ECU30,000), 1.8.92 - 31.1.96, *MEDLAR 2*, Principal investigator at Leeds: A G Cohn

CEC (Exploratory Activity) ECU 49,000, 1.11.93 - 31.10.96, Consortium: Leeds(prime contractor), Sarbruecken and Cyprus, *KIT1012 COMPUCYPRUS*, Principal investigator at Leeds: A G Cohn

HEFCE/JISC New Technologies Initiative £37000, 1.8.94 - 28.2.96, *KnowTIS: Knowledge-Based Modular Timetable Information System*, Principal investigators: E Atwell and A G Cohn

CEC HCM Network, SPACENET, ECU 132,000, 1.12.94 - 30.11.97, Coordinator: University of Leeds, Principal scientist: A G Cohn.

Ordnance Survey, Versatile Support for Ontology Construction, Principal Investigator: V Dimitrova, Co-investigator: A G Cohn, £145643, 01/05/2007 – 03/2012

EU FP7, Cognitive and Flexible learning system operating Robust Interpretation of Extended real sceNes by multi-sensors Datafusion, (Co-FRIEND) Principal Investigator: A G Cohn, Co-investigator: David Hogg, € 524,484, 01/02/2008 – 1/2011

Royal Society, Topics in Qualitative Spatio-temporal Reasoning, £2480.00, Principal Investigator: A G Cohn; 03/04/2008 – 6/2008

EPSRC, Geometric Abstractions for Scalable Program Analyzers, Principal Investigator: A G Cohn; Co-investigator: P M Hill, £51230, 01/10/2008 – 9/2009

EPSRC, Mapping the Underworld: Multi-Sensor Device Creation, Assessment, Protocols, £395610, Principal Investigator: A G Cohn; 01/09/2008 – 28/2/2013

Detection of Archaeological Residues using remote sensing Techniques (DART), AHRC/EPSRC Science Heritage funding (Large Grant) £534,833 + 3 studentships (£146,887). Principal Investigator: A G Cohn; 01/04/2010 – 30/9/2013. The grant is collaborative with 4 other Universities (Bradford, Birmingham, Nottingham, Winchester)

Cognitive Workflow Capturing and Rendering with On-Body Sensor Networks (COGNITO) EU FP7, Co-PIs D C Hogg and A G Cohn, € 500689, 1/1/2010 - 31/12/2012

CONFLUENCE-2, £30,000, 1/3/2009-28/2/2012, Ordnance Survey, PI: V Dimitrova, Co-I: A G Cohn

Data management and mapping for Oman Earthwatch Programme, Consultancy, £12,000, PI: Dr A R Beck, co-I: A G Cohn, 1/1/2010 - 31/3/2010.

Phase 2 of VISTA trial in Scotland, £14,000 consultancy, PI: A G Cohn, 1/1/2010-31/7/2010

Faculty of Engineering University of Leeds "ICEPICK" Award, £3000, 2009.

KTS award, - £30,731 for secondment (of 20% A R Beck) to 1Spatial, 1/4/10-30/9/12

Visual Intelligence Grounded in Learning (VIGIL), subcontractor to SRI on DARPA Mind's Eye program grant, (W911NF-10-C-0083), 2010-2012, 389,767 .

Robustness by Autonomous Competence Enhancement (RACE), EU FP7, 518,874 euros EC contribution to Leeds, PI: A G Cohn, Co-I: D C Hogg, 1/12/2011 - 30/11/2014.

Approximate reasoning with qualitative spatial constraints involving landmarks, Australian Research Council, Co-Investigators: Sanjiang Li (University of Technology, Sydney), Jochen Renz (Australian National University, Canberra), Partner-Investigator: A G Cohn, AU$150,000 (for all universities), 1/1/2012-31/12/2014.

DART ARSF data collection-Detection of Archaeological residues using remote sensing techniques, NERC ARSF Award No. GB 12-06, PI: A R Beck, Collaborators: A G Cohn, D Boyd, D Stott, G Ferrier, Q Carroll, T Overbury, N Metje; no direct monetary value, but four flights allocated to be flown in 2012 to gather hyperspectral data over selected areas of southern England.

New Technologies for Tunnelling and UNderground works (NeTTUN), 1/9/12 - 28/2/17, EC contribution: 9,974,600 Euros, 861,440 Euros for Leeds, PI at Leeds: A G Cohn, Co-Is: D R Magee, V Dimitrova. Whole project co-ordinated by NFM, with more than 20 partners altogether).

STRANDS (Spatio-Temporal Representations and Activities for Cognitive Control in Long-Term Scenarios), EU FP7 IP project, 1049451 euros for Leeds, PI at Leeds: A G Cohn, Co-I: A G Cohn, 1/4/13-31/5/17 (Co-ordinated by the University of Birmingham, with 6 other partners).

Assessing the Underworld, EPSRC, £591900.09, PI at Leeds: A G Cohn, Co-Is: D R Magee, B Clarke, 01/06/2013 - 31/1/2018 (part of a Programme grant led by Prof C Rogers at Birmingham)

National Facility for Innovative Robotic Systems, £2.6M, 01/08/2013 - 1/03/2015, PI: Dr Robert Richardson; Co-Is: Abbas Dehghani, Anne Neville, Martin Levesley, Peter Culmer, Jordan Boyle, Andrew Bell, Timothy Stevenson, Netta Cohen, Anthony Cohn, David Jayne, Ian Robertson, Steven Freear

Blueclaw Conversions Ltd KTP, Technology Strategy Board, £189623.09, 1/10/13 - 31/03/16 (terminated early after bankruptcy of Blueclaw Conversions Ltd), PI: V Dimitrova, Co-I: A G Cohn

A Novel Cognitive Fault Diagnosis Framework, Royal Society/CSC, 01/04/2013 - 31/03/2015, £12,000. PI: A G Cohn (in China: H Chen)

Balancing the impact of City Infrastructure Engineering on Natural Systems using Robots,£4,127,380, PI: P Purnell, Co-Is: M Miodownik, R Richards, A Brown, M Basheer, R Ruentes, M Dallimer A G Cohn, G Graham, N Metje, I Robertson, N Somjit, A A Delghani-Sanij, N Merat, D N Chapman, N Cohen, S D Prior, G A Dymski, J Kim, CDF Rogers, EPSRC, 4/1/16 - 3/1/2021

Robotic Manipulation Planning for Human-Robot Collaboration on Forceful Manufacturing Tasks (HumRobManip), PI/ Marie Sklodowska-Curie Individual Fellowship holder: Mehmet Dogar, Named Supervisor: A G Cohn, 195,454 euros, 5/2017 - 5-2019

Qualitative Spatial Logics for Validating Matches between Spatial Objects, RMB 280,000, PI: H Du, Co-Is: A G Cohn, N Alechina, NSFC, 1/1/2018-31/12/2020

Humanlike physics understanding for autonomous robots, £303,127, EPSRC, PI: A G Cohn, Co-Is: M Dogar, M Mon-Williams, F Mushtaq, H Wang, M Leonetti, 1/4/18-28/2/21.

Intelligent Excavations, Highways England, £18,571, PI: A G Cohn, 1/9/17 – 31/5/18

EPSRC Impact Acceleration Account Phase 3, 01/6/18-30/5/19, £62,337, PI: A G Cohn, Co-Is: V Dimitrova, B Clarke, D R Magee.

Predict-Plan-Control, European Union, £137,591 [Marie Curie Incoming Fellowship for Luis Figuredo – I am the official Leeds supervisor, but day to day supervision done by Mehmet Dogar] 01/05/2018-30/04/2020.

A European AI On Demand Platform and Ecosystem, EU - European Union. £115,435, PI A G Cohn, Co-I: V Mueller, 01/01/2019- 31/12/2021,

Highways England, Decision Support System for Thin Surface Paving, PI: A G Cohn, co-Is: Vania Dimitrova and Barry Clarke, £46,000, 1/4/20 – 31/3/21

Turing Fellow 1.10.18-30.9.22, 5% of Salary (∼£60,000)

Robot skill learning: imitation, exploitation and control (RobotSL), European Union, £137,591 [Marie Curie Incoming Fellowship for Yanlong Huang – I am the official Leeds supervisor] 01/04/2021 - 31/03/2023, 212,933.76 Euros.

Opis Foundational and Extensible Descriptive Models, DSTL, subcontract via Fraser Nash, 1/10/19-30/9/20, PI: A G Cohn, Co-Is: B Bennett, V Dimitrova, £38,494.29

Serapis subcontract via Fraser Nash from DSTL, PI: A G Cohn, co-I Brandon Bennett, 2020, £4199.

Understanding imprecise space and time in narratives through qualitative representations, reasoning, and visualisation, ESRC, 1/4/22 - 30/6/26, £342,492.64 (to Leeds), Investigators at Leeds: A G Cohn, J G Stell

Evaluation of the capabilities of Large Language Models: Commonsense Reasoning – Secondment to the Alan Turing Insitute, PI A G Cohn, £288,000, 1/4/23-31/3/26

Disruptive Technologies, Alan Turing Institute, £80,000, PI: A G Cohn, 1/4/23 – 31/8/24

Evaluating the Commonsense Reasoning Capabilities of LLMs , USD20,000 for Azure credits to conduct experiments, Accelerating Foundation Models Research Programme, Microsoft Research, 1/5/23 - 30/6/24.

Robust inference with probabilistic answer set programs scaffolds for large language models, PI Pranava Madhyastha, Co-Is: Alessandra Russo and Anthony G Cohn, Alan Turing Institute, £483,016, 1/1/2024-31/8/2026

Participation in European Networks of Excellence:

Elected member of Executive Council of COMPULOG network (1992 –1995) and treasurer (1994 – 1995).

Esprit (FP4) Network of Excellence 22672 - MONET, Model-Based and Qualitative Reasoning Systems Network (June 1997 – May 2000), elected member of Executive and Research Committees.

Theory and Applications of Relational Structures as Knowledge Instruments (TARSKI), EU COST Action 274, 2001 – 2004, member of Management Committee.

ECVision Network of Excellence: European Research Network for Cognitive Vision Systems, IST Project 35454, April 2002 - March 2005, member node.

Node in German Academic Exchange Service (DAAD) funded International Quality Network on Spatial Cognition, 1 Jan 02 - 31 Dec 03.

Invited Presentations at International Meetings :

1. European Conference on AI (ECAI) Tutorial Lecturer on Qualitative Reasoning, Brighton (joint with P J Hayes) (July 1986).

2. Invited Lecturer at ECCAI summer school ACAI87, Oslo (July/August 1987).

3. Invited Speaker at AAAI Workshop on Principles of Hybrid Reasoning, St Paul, (Aug. 88).

4. Invited Speaker at AAAI Spring Symposium on Representation and Compilation in High Performance Theorem Proving, Stanford, (March 1989).

5. Invited Speaker at Third Workshop on the Semantics of Space, Time and Movement, Toulouse, Sept 1991 (talk given by my RF, David Randell in my unavoidable absence).

6. Invited Speaker at AAAI Fall Symposium on Principles of Hybrid Reasoning, Asilomar, California (Nov 91).

7. Invited Speaker at IFIP Workshop on the Role of Knowledge Representation in Qualitative Reasoning, Florida, (Feb 92).

8. Invited Tutorial to NVKI (Dutch AI Society), Amsterdam (March 92).

9. Invited Speaker at ERCIM(European Research Consortium for Informatics and Mathematics) Workshop on Theoretical and Experimental Aspects of Knowledge Representation, Pisa (May 92).

10. Invited Speaker at Fourth Workshop on the Semantics of Space, Time and Movement, Ch. de Bonas, France, Sept 1992.

11. Invited Speaker at Special Session on Spatial Reasoning, QUARDET93, Barcelona, June 1993

12. Invited Speaker at the 16th International Wittgenstein Symposium, Kirchberg/Wechsel, Austria, 1993

13. Invited Panelist, IJCAI Workshop on Spatial and Temporal Reasoning, Chambery, France, August 1993.

14. Invited Panelist at COSIT Conference, Elba, Italy, September 1993.

15. Invited Speaker at the Workshop on the Topological Foundations of Cognitive Science, First International Summer Institute in Cognitive Science, Buffalo, USA, July 1994

16. Invited Speaker at the Workshop on the Ontology of Space, First International Summer Institute in Cognitive Science, Buffalo, USA, July 1994

17. Invited Panelist, ECAI Workshop on Spatial and Temporal Reasoning, Amsterdam, August 1994.

18. Invited Speaker at International School on Spatial Reasoning, Bolzano, Italy, Spring 1995.

19. Invited Speaker at 5th Toulouse International Workshop TIME, SPACE and MOVEMENT (TSM), Toulouse, June 1995.

20. Invited workshop organizer/speaker at ESLLI 95 (European Summer School on Logic, Language and Information), Barcelona.

21. Invited tutorial speaker at the conference on Formal and Practical Aspects of Practical Reasoning (FAPR), 1996, Bonn.

22. Invited Speaker at Artificial Intelligence and Symbolic Mathematical Computation (AISMC-3: Steyr, Austria, September 1996)

23. Invited Speaker at German AI Conference, KI-97 (Freiburg, Germany, September 1997)

24. Invited Speaker, National Science Foundation (NSF) special initiative workshop on spatial reasoning near Baltimore, USA in May 1997.

25. Invited lecture at the IJCAI'99 workshop on Adaptive Spatial Representations of Dynamic Environments

26. Invited lecture on Qualitative Spatial Reasoning at a Summer School in Bertinoro, Italy, in May 2000.

27. Invited Speaker, 19th Conference on Automated Deduction (CADE-19), Miami, July 2003.

28. Invited Speaker, AAAI Spring Symposium on Foundations and Applications of Spatial and Temporal Reasoning (FASTR), Stanford, March 2003.

29. Invited lecturer (5 x 1.5 hours), International Spatial Cognition Institute, 24 Aug and 6 Sep 03, Bad Zwischenahn, Germany.

30. Invited Tutorial Speaker and Cognitive Systems confence, Bled, Slovenia, October 2004.

31. Invited lecturer at Australian Logic Summer School, Canberra, December 13-17, 2004

32. Invited Speaker at KBCS-2004, Hyderabad, December 2004

33. Invited Speaker at CIT'04, Hyderabad, December 2004

34. Invited Speaker at Pattern Recognition and Computer Vision Colloquium, Czech Technical University, Spring 2005

35. Invited Speaker at Mapping the Human Body: Spatial Reasoning at the Interface between Human Anatomy and Geographic Information Science, Buffalo, 2005

36. Invited Tutorial Speaker, Third Summerschool on Cognitive Vision, Bonn, Germany, 2005

37. Keynote speaker, National Workshop on Trends in Advanced Computing, 2006 Tezpur, India, 23-24 January, 2006

38. Invited Speaker, European GeoInformatics Workshop, Edinburgh, March 2007

39. Invited Speaker, Towards Interoperability of Biomedical Ontologies, Dagstuhl Seminar 07132, March 2007, Germany

40. Invited Speaker CogRob 2008, The 6th International Cognitive RoboticsWorkshop, July 21-22, 2008 Patras, Greece

41. Invited Speaker, PCAR2008: Second International Symposium on Practical Cognitive Agents and Robots, 22 September 2008, Sydney, Australia

42. Keynote speaker 21st Australasian Joint Conference on Artificial Intelligence - AI-08, Auckland, New Zealand, 2008.

43. Invited Speaker Commonsense-2009, the Ninth International Symposium on Logical Formalization on Commonsense Reasoning, June 1-3, 2009, Fields Institute, Toronto, Canada.

44. Invited Speaker 15th Computer Vision Winter Workshop 2010 (CVWW-10), Nove Hrady Czech Republic, January 2010

45. Invited Speaker 23rd Florida Artificial Intelligence Research Society Conference (FLAIRS-23), Spatial-Temporal Reasoning TRack, May 2010

46. Invited Speaker International Conference on "Advances and Emerging Trends in Computing Technologies" June 21-24, 2010, Chennai, India

47. Invited Talk: IEEE SMC Workshop on Artificial Intelligence and Applications, Belfast, June 2010

48. Invited Speaker ECAI-10 Workshop on Artificial Intelligence and Logistics (AILog), Lisbon, August 2010

49. Keynote Speaker 4th International Conference on Knowledge Science, Engineering and Management (KSEM 2010) 1-3 September 2010 Belfast, Northern Ireland, UK

50. Invited Speaker, MIWAI'08, Thailand, December 2010.

51. Invited Speaker, 11th AI*IA Symposium on Artificial Intelligence Brescia (Italy), December 1-3, 2010

52. Keynote Speaker, 7th AIAI Joint Conference (Artificial Intelligence Applications and Innovations), September 2011, Corfu, Greece

53. Invited Speaker at SANKEN International Symposium 2012, January 12 and 13, 2012, at Osaka University, Japan

54. Keynote Speaker, 4th International Conference on Agents and Artificial Intelligence (ICAART), Portugal, February 2012

55. Keynote Talk, 2nd World Conference on Innovation and Computer Sciences (IN-SODE),Efes, Turkey, May 2012

56. Invited Speaker, ICAPS 2012, the 22nd International Conference on Automated Planning and Scheduling, Brazil, June 2012.

57. Invited Speaker Space, Time and Ambient Intelligence 2013 (STAMI), Bellevue, Washington.

58. Invited talk at SL2MOD workshop at ISWC 2013, Sydney

59. Invited talk at AAAI Spring Symposium on "Qualitative Representations for Robots" and "Knowledge Representation and Reasoning in Robotics", March 2014

60. Invited Panellist at IWCV-14, Italy, May 2014

61. Invited talk at 14th International Conference on Principles of Knowledge Representation and Reasoning (KR-14), Vienna, July 2014

62. Invited talk at Social Robotics 2014, Sydney

63. Invited talk at 2014 International Workshop on Nature Inspired Computation and Applications, Hefei, China, Nov 2014

64. Invited Talk at UK Ontology Network event, Leeds, April 2015.

65. Invited talk at Language and Vision workshop at CVPR, June 2015

66. Invited Speaker at Workshop on trans-disciplinary tools for image and video understanding, Paris, November 2015

67. Invited Position Speaker at AI for Robotics: Where are the fruits, and how do we pick them?, A workshop at the European Robotics Forum, Edinburgh, UK, March 22, 2017

68. Invited Speaker at Cognitum workshop at IJCAI 2017

69. Invited Panelist at at Cognitum workshop at IJCAI 2017

70. Keynote Talk at The 1st International Conference on Networks Information Service, Qingdao, July 2017.

71. Invited Speaker at Social Robotics Meeting organised by Commonwealth Bank of Australia and the University of Technology Sydney, August, 2017

72. Keynote talk and Future Networks Conference, Qingdao, China, October 2017

73. Invited Speaker at Advances in Cognitive Systems, Troy, New York, 2017.

74. Invited Speaker at IJCAI Workshop on AI for Internet of Things, Stockholm, 2018

75. Invited Speaker at R2k: Integrating Learning of Representations and Models with Deductive Reasoning that Leverages Knowledge, Workshop at KR-18, Tempe, USA.

76. Invited Speaker at the International Workshop on "Spatial Language Understanding" held in conjunction with NAACL-2018, June 1–6, 2018, New Orleans, Louisiana, USA

77. Invited Speaker at IROS Workshop: Robots that Learn and Reason: Towards Learning Logic Rules from Noisy Data, Madrid, 2018

78. Invited talk at IFIP conference, Nanning, China, October 2018

79. Keynote talk at China-UK Big data and AI Forum and Opening Ceremony of BUPT (Changzhou) New Information Technology Research Institute, May 18-20, 2019,

80. Invited Talk at QR-19, Macau, China, 2019

81. Keynote Speaker at IEEE Smart World Congress, Leicester, UK, 2019

82. Keynote talk at Second International Conference on Network Information Services (ICNIS) Tai'an, (organised by the China Automation Society) October 2019

83. Keynote talk at AISB symposium on Language Learning for Artificial Agents (L2A2), Falmouth, April 2019

84. Keynote talk at International Conference on Construction Technology in Tunnelling and Underground (CTTU), Melbourne, January 2020.

85. Global Digital Economy Forum for Small and Medium Enterprises (DES2020), China, 2020

86. Invited Talk at KI-20 conference, Bamberg, Germany, September 2020.

87. Keynote talk at Shangai Tunnelling conference, April 2021

88. Invited talk at International Intelligent Communication Forum, China, May 2021

89. RSS 2021 Workshop on Declarative and Neurosymbolic Representations in Robot Learning and Control,s July 2021

90. International Conf. on Intelligent Computing (ICIC-21), August, 2021

91. Keynote talk at IARCE Conference, Chengdu China, November 2021

92. Invited talk at the Ninth Annual Conference on Advances in Cognitive Systems, November 2021

93. 4th Annual Innovative Engineering Research Conference (AIERC) 2021;

94. Spacious Spatiality, May 2022

95. Dagstuhl Perspectives Workshop 22282 Current and Future Challenges in Knowledge Representation and Reasoning, July 2022

96. QR-22, August 2022

97. Invited talk at Turing Symposium on Large Language Models, February 2023

98. Invited Speaker, Royal Society Yusuf Hamied Workshop for India and the UK, July 2023

99. Keynote speaker in ICRI Lecture Series (International Joint Research Center for Resilient Infrastructure), August, 2023

100. Invited talk at LOD-23, September 2023

101. Keynote talk, The 2nd International Workshop on Geospatial Knowledge Graphs and GeoAI: Methods, Models, and Resources, September 2023

102. Invited Plenary Talk, UNSW AI Symposium, November 2023

103. Invited Keynote talk at IJCLR, Nanjing, September 2024.

Invited Presentations at National Meetings:

1. Invited Speaker at HP User Group conference, Warwick (July 1985).

2. Invited Speaker at British Computer Association for the Blind's conference on Expert systems, Handforth (May 1987).

3. Invited Speaker at British Theoretical Computer Science Symposium, Warwick (March 1986).

4. Invited Keynote Speaker at INFO User group conference, Aston (Sept. 1986).

5. Invited Speaker at Alvey Knowledge Based Systems Club Meeting, Oxford, (January 1987).

6. Invited Speaker at Meeting on Many Sorted Logic and its Applications in Computer Science, Leeds (Sept. 1988).

7. Invited lecture at BCS-ES Evening Seminar Series, London (October 1990).

8. Invited Speaker at AISB91 Conference, Leeds, April 1991.

9. Invited Panelist at AISB94 Workshop on Spatial Reasoning, Leeds 1994

10. Invited Keynote Speaker, AISB'04, University of Leeds.

11. Invited Keynote Speaker, AISB'07, University of Newcastle.

12. Keynote talk at 14th Annual UK Workshop on Computational Intelligence, Bradford, September 2014

13. Invited Talk at The 4th UK Ontology Network Meeting, April 14th 2015: Knowledge Representation meets Robotics: Learning rule based models of activity from video

14. Invited Keynote Speaker at 17th Annual UK Workshop on Computational Intelligence (UKCI-17), Cardiff, 2017

15. Invited talk at AI for the North, Leeds, 2019

16. Keynote talk at 4th Annual Innovative Engineering Research Conference (AIERC) 2021 , Bradford.

Invited Seminars:

Aberdeen University; Adelaide University, Australia; Albany University, USA; Australian National University; Birmingham University; BT, Ipswich; Birmingham University; Bremen University; Bristol University; CEAB, Blanes, Spain; Cambridge University; DFKI/Universitaet Saarlandes, Germany; Edinburgh University; Essex University; Exeter University; Griffiths University, Brisbane, Australia; HP Labs, Bristol; HP Labs, Palo Alto, USA; Hamburg University, Germany; Honeywell Inc, USA, IBM Stuttgart, Germany; IRIT, Université Paul Sabatier; Illinois University, USA; Imperial Cancer Research Fund, London; Imperial College; Karlsruhe University, Germany; Keele University; MCC, Texas, USA; McDonnell Douglas, St Louis, USA; Muenster University; Open University; Oxford University; Qingdao University of Science and Technology; QMC, University of London Rochester University, USA; Shangxi Normal University; SCI, Bristol; Shandong University, SRI, California; Strathclyde University; Sussex University; SusTECH; Sydney University, Australia; Technical University of Vienna; Tongji University; Tsinghua University; University of Bremen; University of British Columbia; University of Freiburg; University of Leeds; University of New South Wales; University of Technology Sydney; Tongji University; Xerox Parc, USA; York University.

Invited attendee at closed workshops and symposia:

Future of Expert Systems Workshop, Edinburgh (June 86).

Workshop on Non Standard Logics, Rodez, (June 1987).

AAAI Workshop on the Principles of Hybrid Reasoning, St Paul, USA (Aug 1988).

Workshop on Non Standard Logics, Rocamadour, (Oct. 1988).

AAAI Spring Symposium on Representation and Compilation in High Performance Theorem Proving, Stanford, March 1989.

3rd International Qualitative Physics Workshop, Stanford, August, 1989.

UNESCO sponsored symposium entitled "AI in Higher Education", Prague, Oct. 1989.

UNIF90 International Workshop on Unification, Leeds, July 1990.

5th International Qualitative Reasoning Workshop, Austin, May, 1991.

AAAI Fall Symposium on the Principles of Hybrid Reasoning, Asilomar, USA, Nov 1991

European Workshop on "Spatial Concepts: Connecting Cognitive Theories with Formal Representation", at ECAI, Vienna, August, 1992.

6th International Qualitative Reasoning Workshop, Edinburgh, August, 1992.

AAAI Fall Symposium on Design from Physical Principles, Cambridge, Mass., USA, Oct 1992.

7 Alvey/IED workshops.

International Workshop on Formal Ontology in Conceptual Analysis and Knowledge Representation, Padova, 1993

Specialist NCGIA Meeting on Time in Geographic Space, Lake Arrowhead, California, May 1993

IJCAI 93 Workshop on Automated Theorem Proving, Chambery (France), August 1993.

IJCAI 93 Workshop on Spatial and Temporal Reasoning, Chambery (France), August 1993.

7th International Qualitative Reasoning Workshop, Washington, 1993.

GISDATA Meeting on Regions with Undetermined Boundaries, Baden, Austria, May 1994

AAAI94 Workshop on Integrating Language and Vision, Seattle, August 1994

ECAI94 Workshop on Spatial and Temporal Reasoning, Amsterdam, August 1994

ECAI94 Workshop on Parts and Wholes, Amsterdam, August 1994

9th International Qualitative Reasoning Workshop, Amsterdam, 1995.

NCGIA meeting on "Formal Models of Common Sense Geographic Worlds", San Marcos, Texas, October 30 – November 3, 1996.

IJCAI97 Workshop on Spatial and Temporal Reasoning. 1997

ICCV98 Workshop on Conceptual Description of Images (CDI-98), Mumbai, India, 1998.

Qualitative Reasoning: the Twelfth International Workshop, Cape Cod, MA, 1998.

"Scale and Detail in the Cognition of Geographic Information", Project Varenius Workshop, Santa Barbara, California, May 14-16, 1998

ECAI 98 Workshop on Intelligent Virtual Environments, Brighton, 1998.

IJCAI-99 Workshop on Hot Topics in Spatial and Temporal Reasoning. 1999.

IJCAI-99 Workshop on Adaptive Spatial Representations of Dynamic Environments. 1999.

ECAI 2000 Workshop on Current Trends in Spatio-Temporal Reasoning. 2000.

Spatial Cognition 2002, 21-23 May 2002, Tutzing Castle, Germany

Dagstuhl seminar on Cognitive Vision systems, 03441, November 2003

Spatial Webs Workshop, Santa Barbara, December 2004

FB/TR 8 Spatial Cognition and the Spatial Intelligence and Learning Center (SILC) International Spatial Cognition Workshop, New York, July 2009.

Workshop on Liquid , Italy, January 2009 (Panelist)

ISO-Space workshop, Maryland, September 2010

AAAI-IJCAI Summit on Artificial Intelligence, New York, 2014

Fellowships and other honours:

Recipient of the 2021 Herbert A. Simon Prize for Advances in Cognitive Systems for my research on qualitative representation and reasoning about space and time, cognitive vision and robotics, and visually-grounded language processing.

Elected Fellow of Asia-Pacific Artificial Intelligence Association (AAIA), FAAIA, 2021.

Listed in *Who's Who*, from 2017

Elected a Fellow of the Royal Academy of Engineering, 2015.

Donald E Walker Distinguished Service Award, IJCAI-15. "The IJCAI Distinguished Service Award was established in 1979 by the IJCAI Trustees to honor senior scientists in AI for contributions and service to the field during their careers". The citation reads: "At IJCAI-15, the Donald E. Walker Distinguished Service Award will be given to Anthony G. Cohn, Professor of Automated Reasoning at the University of Leeds. As a pioneering researcher in Knowledge Representation and Reasoning, Professor Cohn is recognized for his substantial contributions, as well as his outstanding service to the international, European and UK AI communities, including terms as President of IJCAI, ECCAI, KR Inc., and AISB, and as Editor-in-chief of the AI journal, where he made significant contributions to the success of the journal and to the wider dissemination of AI into the scientific community".

AAAI Distinguished Service Award 2012 for extraordinary and sustained service to the artificial intelligence community.

Elected Founding Fellow of European Coordinating Committee on Artificial Intelligence (FECCAI) 1999. (Now Fellow of the European Association for Artificial Intelligence, FEurAI)

Elected member of UKCRC (An Expert Panel of the British Computer Society, the Institution of Electrical Engineers and the Council of Professors and Heads of Computing).

Fellow of the British Computer Society (FBCS)

Fellow of the Institute of Electrical Engineers (IEE)/Institute of Engineering Technology (FIET)

Fellow of the Society for the Study of Artificial Intelligence and Simulation of Behaviour (FAISB)

Fellow of the Association for Advancement of Artificial Intelligence (FAAAI)

The entry from the Cognitive Vision project (which I was a co-PI of) won the annual British Computer Society Machine Intelligence prize in December 2004.

Faculty of Engineering, University of Leeds Research Excellence Award, 2006

The VAULT system based on the MTU and VISTA projects provides the world's first real time delivery of integrated utility records nationwide and won the Built Environment category of the IET Innovation Awards in 2012 (also Highly commended in the IT category) and the 2012 NJUG Awards in the "Avoiding" Damage" category.

Best Paper Awards etc:

British Computer Society Machine Intelligence prize in 2004

Best poster and best presented poster runner up awards at 15th ACM International Symposium on Advances in Geographic Information Systems (ACM GIS 2007)

Best In-Use paper at ESWC-15

Runner up best student paper at ECAI-16

Nominated for best paper (Resources Track) at ISWC 16

Best paper at RoboNLP 17 Workshop at ACL-17

Best Video at IJCAI-17

Runner up for "best technical implementation" in the Robots for Resilient Infrastructure Challenge 2017, Weetwood Hall, Leeds.

My PhD student Muhannad Alomari was runner up in the 2017 EurAI Best European AI Dissertation Award

Test-of-Time Classic Paper Award for paper in KR-92 on the Region Connection Calculus (RCC), awarded 2020.

Media Appearances and Public Dissemination

25/05/12: Interviewed on a BBC Radio 4 programme on Mapping Britain's Underworld, be presented by Adam Hart-Davis (http://www.bbc.co.uk/programmes/b01hxt5n).

23/3/06: BBC Radio Solent: a short interview with Prof. Tony Cohn about the VISTA project

28/3/06: BBC Radio 4, "You and Yours": an item entitled "Holes in the ground" with Prof. Tony Cohn

31/3/06: BBC Look , with Prof. Tony Cohn and David Owen (Yorkshire Water) about the VISTA project

31/3/06: BBC Radio Leeds, with Prof. Tony Cohn about the VISTA project.

4/8/14: Financial Times: G4S Powers up the Security Industry, interviewed and quoted.

June 2016: Interviewed twice on TalkRadio on matters relating to AI

2017: Interviewed for an Amazon Audible Podcast "Days that Changed the World", on the 20th Anniversary of the Deep Blue chess beating Kasparov at Chess.

2023: Appeared on Channel 4 Evening News talking about the alleged existential threat to humanity from AI

2023: interviews with TalkRadio (x 2), TimesRadio on AI

10 April 2024: Talk on Artificial Intelligence at "Forum 2000", Horsforth, West Yorkshire.

Supervised Completed Postgraduate Research Students (* indicates co-supervision):

A K Courtney (MPhil 1989); Gerry Kelleher (* PhD 1990, took over supervision on arrival at Leeds, Jan 90 – July 90) Felix Hovsepian (PhD 1992); David Randell (PhD 1991); Christopher Johnson (MSc by dissertation awarded, 1989); Guy Saward (PhD 1991); Guri Lajos (* PhD 1992); Ian P Gent (PhD 1992); Brandon Bennett (PhD 1998); Andrew Adams (* MSc by Dissertation with Distinction awarded, 1994); G C Ralha (PhD 1996); Jose C L Ralha (PhD 1998); Jonathon Fernyhough (* PhD 1996); S Wright (* PhD 2000); Shyamanta M Hazarika (PhD 2005); Zia Al Qayyum (PhD 2008); Muralikrishna Sridhar (* PhD 2011); Krishna Dubba (* PhD 2012); Ronald Denaux (* PhD 2013); John Greenall (* PhD 2013); Zito Xiong (* PhD 2014); Aryana Tavanai (*PhD 2016); David Stott (* PhD 2017); P Pueblo Guillen (* PhD 2017); Paul Duckworth (* PhD 2017); Muhannad Al Omari (* PhD 2017); Jawad Tayyub (*PhD 2018); Harriet Peel (*PhD 2019); Adam Richard-Bollans (*PhD 2021); Rafael Papallas (* PhD 2021); Paul Brown (*PhD 2022); Simin Hong (* PhD 2022); Alexia Toumpa (2023); Joseph Gallear* (2024).

Research Assistants and Research Fellows:

G Footring (1984-6); C Jenkins (1984-5); F Hovsepian (1985-9); D Randell (1989-92); Z Cui (1990-92); P M Hill (1992 - 1996); N Gotts (1993 - 1996); J Gooday (1993 - 1996); G Lajos (1990 - 1993; 1994 - 1996); B Bennett (1995 - 2003); F Ibanez (1995 -1996); A Isli (1997-1998); D Magee (1999 - 2003); A Galata (1999 - 2003); V Devin (1999 - 2003); P Santos (2003 - 2004); C Needham (2003 - 2004); Gaihua Fu (2005-2008); Anthony Beck (2006-2013); N Boukhelifa (2006-2009), S Hickinbotham (2006-8); P Harper(2006-9); R Denaux (2007-8); H Dee (2006-2009); R Fraile (2006-2009); H Chen (2009-12); A Behera (2010-2013); H Lodhi (2011-2012); R Dutta (2011-2012); F Gu (2011-2012); K Dubba (2012-2014); Q Dou (2012-2016.); M Sridhar (2010-2013); Y Gatsoulis (2013-2016.); E Chinellato (2013-2016); L Wei (2015-2021); Heshan Du (2015-2016); Q Mahesar (2015-1017), A Binch (20160-2017); M Hawasly (2016-2017), S Luo (2015-1017); A Shirazi (2016-2017); J Lones (2017-2021); Kareem Al Ammari (2018-2020); Jawad Tayyub (2018-2018); Luis Figueredo (2020); Mohamed Hasan (2017-2021); Erum Haris (2023-?); Ryan Burnell (2023-2023); Robert Blackwell (2024-2026).

Teaching:

I have taught at undergraduate and postgraduate level including courses on Artificial Intelligence, in particular Knowledge Representation,Machine Learning , as well as other aspects of computing including Operating Systems and Compilers. I have supervised undergraduate and MSc projects, been a member of the School Learning and Teaching Committee and its Examination Board (including chairing it whilst Head of School), Programme Director for Artificial intelligence modules and programmes.

Journal Refereeing:

Artificial Intelligence, Journal of the Association for Computer Machinery (JACM), Theoretical Computer Science, Journal of Automated Reasoning, Software Practice and Experience, International Journal of Approximate Reasoning, Artificial Intelligence, International Journal of Geographical Information Science, Artificial Intelligence Review, Intelligent Systems Engineering, Int. J. of Geographic Information Systems, Computer Journal, Bulletin of the IGPL, Spatial Cognition and Computation, Image and Vision Computing, Journal of Visual Languages, Knowledge Engineering Review, Journal of Philosophical Logic, Journal of Visual Computing, International Journal of Geographical Information Science, Journal of Artificial Intelligence Research.

I have also acted as referee for many publishers, conferences and workshops.

Services to Learned Societies and Research Centres

Local Organiser of AISB85, University of Warwick.

Elected Hon. Treasurer Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB), 1986 – 1988

Elected Hon. Vice Chairman Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB), 1989 – 1991

Elected Treasurer of European Coordinating Committee for Artificial Intelligence (ECCAI), 1988 – 1990

Alvey/IED Deep Knowledge Based Systems SIG chairman, 1987 - 1989 and representative on Alvey KBS Club Steering Committee, 1987 – 1989

Deputy Director, Centre for Theoretical Computer Science, University of Leeds, 1990 – 1992.

Elected Chairman of European Coordinating Committee for Artificial Intelligence (ECCAI), 1990 – 1992

Elected Hon. Chairman Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB), 1992 – 1994

Director, Centre for Theoretical Computer Science, University of Leeds, Aug. 1992 – July 1998.

Member of judging panel of the CPHC/BCS Distinguished Dissertation award scheme, 1998 – 2000

Trustee of International Joint Conferences on Artificial Intelligence (IJCAI), 1999 – 2006 (observer 2007-2009).

Member of Nominating Committee of European Coordinating Committee on AI for ECCAI Fellows, 2000 – 2002

President of *Principles of Knowledge Representation and Reasoning, Incorporated (KR, Inc.)*, 2000-2002

Director of KR, Inc. 2000 – 2023

Member of Advisory Board of KR Inc, 2002 – 2006, 2023- ?

President of *International Joint Conferences on Artificial Intelligence (IJCAI)*, 2003-2005

Member of Executive Committee of UKCRC (UK Computing Research Committee), 2005-9; 2011-2012; 2012-2015; 2015-2018.

Advisory Board Member of International Association for Ontology and its Applications (IAOA) 2010 —

Royal Academy of Engineering: Panel 10 member for 3 years; External Policy Committee member 3 years; Panel member and Advisory Board member for Chairs in Emerging Technology (CiET) for 3 years; Education and Skills Committee member for 3 years; member of Global Talent Visa Programme for 3 years.

Chair of BCS Academy Awards Committee, responsible for the Lovelace and Needham awards, and thus also a member of the BCS Academy Award, 2019 - 2024.

Services to Grant Awarding Bodies/Universities:

Member of SERC ad hoc subcommittee of Logic for IT on Logics for Artificial Intelligence.

Reviewer for National Science Foundation (USA) grant applications.

Reviewer for SERC/EPSRC grant applications.

Reviewer for FWF (Austrian Science Foundation)

Reviewer for CNRS (French science research council)

Member of EPSRC College since 1997.

Member of CNRS Evaluation Committee for IRIT, Toulouse March 2002.

Reviewer for Science Foundation Ireland

Member of visiting evaluation panel for SFI Award, Cork, Ireland, November 2004.

Chair of International Knowledge Representation Review Panel for National Information Technology Computing Australia (NICTA), September 2005.

Member of visiting evaluation panel for SFI Award, Dublin, Ireland, September 2005.

Member of CNRS Evaluation Committee for IRIT, Toulouse November 2005.

Invited participant at Framework 7 planning workshop, Luxembourg, December 2005.

Reviewer of research outputs for a UK Computing Department, December 2005.

Reviewer for EU Framework 6 project, Brussels, January February 2006.

Reviewer of DFG SFB TR/8, Bremen, September 2006.

Reviewer of research outputs for a UK Computing Department, October 2006.

Reviewer of research outputs for a UK Computing Department, January 2007.

Reviewer for EU Framework 6 project, Brussels, January February 2007,

Reviewer for EU Framework 6 project, Toulouse, January April 2008

Reviewer for EU Framework 7 IP project, DFKI Saarbruecken, October 2009, Freiburg 2010, Stockholm 2011.

External member of Chair appointing committee at Universities of Cork, York, Exeter, Aberystwyth, Warwick, Oxford.

Member of Promotion Committee, Open University of Cyprus, 2013

Member of CHIST-ERA Evaluation Panel for Data to Knowledge call, Paris, January and March 2012; member of programme review panel Istanbul March 2014.

Reviewer for EU Framework 7 IP project, RoboHow, Bremen, 2013, 2014, 2015, 2016.

Member of UK Research Excellence Framework (REF) 2014 Sub Panel 11 (Computer Science and Informatics) of Panel B.

Reviewer of draft REF-2021 research submissions for 17 UK Universities.

Past Consultancies:

Consultant on Expert Systems to an international metal process company.

Consultant on Knowledge Representation to BT plc.

Consultant to John Wiley & Sons.

Consultant to Manpower Services Commission.

Journal Editorships

Review Co-Editor of *Artificial Intelligence*, 1997 – 2004

Co-Editor-in-Chief, *Spatial Cognition and Computation*, 2003 –

Co-Editor-in-Chief of *Artificial Intelligence*, 2007 – 2010, re-elected for second and final term 2011-2014

Press Editorships

Editor-in-Chief, *AAAI Press*, 2004 – 2016

Editorial Board Memberships

Data and Knowledge Engineering, 1994 – 1997

AI Communications (AICOM), 1997 – 2005

Policy Board of Electronic Transactions in Artificial Intelligence (ETAI) 1997 –

Advisory Board of new Springer Verlag series: "Cognitive Science and Artificial Intelligence", 2003 –

Spatial Cognition and Computation, 1998 –

Journal of Applied Logic, 2003 –

Applied Ontology journal, 2005 – 2010

External Examinerships:

Overseas Research Degrees:

University of Amsterdam, PhD Thesis, 1992

Université Paul Sabatier, Toulouse, 1998.

Université Paul Sabatier, Toulouse, 2000.

University of Freiburg, 2001

Royal Melbourne Institute of Technology (RMIT), Australia, 2002.

Member of Habilitation Committee, Technical University of Vienna, 2003

Member of PhD committee, University of Ghent, Belgium, 2004

External reader of PhD at Columbia University, February 2005.

Examinateur of PhD, INRIA/University of Nice, December 2005

University of Hyderabad, 2005.

Ludwig-Maximilians-Universitaet Muenchen, 2006.

Ghent University, March 2008

Ghent University, April 2008

Verona University, May 2009,

External Graduate Faculty member at University of Maine's Graduate School and member of a Thesis committee

Sydney University of Technology, April 2010

Ghent University, April 2011

Sydney University of Technology, September 2012

Purdue University, 2013

Universities of Verona/Griffith joint, August 2014

Tezpur, India 2015

University of Tezpur, India, 2016

University of Bremen, May, 2017

Oslo University, 2018

ANU, Australia, 2018

Linkoeping, Sweden, 2022

Northwestern University, USA, 2024

UK Research Degrees:

Edinburgh University Ph.D. Thesis, 1987.

Reviewer for CNAA higher degree proposal, 1987.

Sussex University DPhil Thesis, 1988.

Sussex University DPhil Thesis, 1989.

London University Ph.D. Thesis, 1989.

Edinburgh University Ph.d. Thesis, 1989.

Edinburgh University Ph.d. Thesis, 1990.

London University Ph.D. Thesis, 1990.

University of Essex, Ph.D. Thesis, 1991.

University of Nottingham Ph.D. Thesis, 1991.

CNAA Ph.D. Thesis, 1992.

Sussex University DPhil Thesis 1992.

University of Sheffield, Ph.D. Thesis, 1992.

University of Essex, Ph.D. Thesis, 1992.

University of Oxford, Ph.D. Thesis 1994.

University of London, Ph.D. thesis 1995.

University of Wales, Ph.D. thesis 1996.

University of London, Ph.D. thesis 1996.

University of Manchester, Ph.D. thesis 1997.

University of Exeter, Ph.D. thesis, 2001.

University of London, Ph.D. thesis, 2003.

University of London, Ph.D. thesis, 2007.

University of Nottingham Ph.D thesis 2015

University of Edinburgh, Ph.D Thesis, 2016

University of Birmingham, Ph.D Thesis, 2016

Taught Degrees:

MA in Cognitive Studies, MSc in Knowledge Based Systems, Sussex Univ, 1985-9

BSc in Linguistics and AI, BSc in AI and Computer Science, Edinburgh University, 1987-1991

MSc in Information Systems Engineering, South Bank University, 1990-94

MSc in Knowledge Based Systems, MSc in Computer Science/Studies, University of Essex, 1991-95

MSc in Cognitive Science, University of Manchester, 1994-96

B.Eng and M.Eng in Computing, and BSc and MSci in Computing and Maths, Imperial College, 1998 – 2001

BSc and MSci in Computer Science, University of Warwick, 2001 – 2005

MSc Computing Science, Imperial College, 2005 – 2009

BSc, MSci Computer Science, University of Liverpool, 2005 –

BEng, MEng, University of Southampton, 2006 – 2010

BSc Xi'an Jiaotong-Liverpool University, 2009-2013

BSc, MInf at Edinburgh University, 2013-2017

MSc Imperial College, 2020-2023.

Conference Chairmanships

Programme Chair, AISB89 Conference (Silver Jubilee of SSAISB).

Programme Chair, 11th European Conference on AI (ECAI 94), Amsterdam.

Workshop Chair, 14th Int. Joint Conf. on AI (IJCAI95), Montreal.

Programme Co-Chair, 6th International Conference on Principles of Knowledge Representation and Reasoning (KR'98), Trento, Italy

Conference Chair, 7th International Conference on Principles of Knowledge Representation and Reasoning (KR'00), Breckenridge, USA.

Conference Chair, 18th International Conference on Artificial Intelligence IJCAI'03), Acapulco, Mexico

Programme Co-Chair, 7th Conference on Spatial Information Theory, near Buffalo (COSIT'05), USA.

Co-Organiser, Dagstuhl Seminar "Spatial Cognition: Specialization and Integration", 05491, 2005.

Co-Organiser, Dagstuhl Seminar "Logic and Probability for Scene Interpretation", 07311, 2008.

Co-Organiser, 2009 AAAI Spring Symposium on Benchmarking of Qualitative Spatial and Temporal Reasoning Systems Stanford University, CA, USA, March 23-25, 2009.

Co-organiser of Dagstuhl Seminar 10131 Spatial Representation and Reasoning in Language : Ontologies and Logics of Space (March 2010)

Co-organiser of Dagstuhl Seminar 10412 QSTRLib: A Benchmark Problem Repository for Qualitative Spatial and Temporal Reasoning (October 2010)

Co-organiser of Dagstuhl Seminar 14081 Robots Learning from Experiences, Februrary 2014.

Conference and Workshop Committee Memberships

Programme Committee Member for AISB87, Edinburgh.

Programme Committee Member for Alvey DKBS3,4,5,6,7,8 workshops.

Member of local organising committee European Conference on AI, ECAI98, Brighton.

Programme Committee Member, ECAI 90, Stockholm (European Conference on AI).

Co-organiser of "Logfit" workshop on Automated Theorem Proving, Leeds, (January 1991)

Programme Committee Member, World congress: intelligent manufacturing technology and systems (Yugoslavia 1992)

Programme Committee Member, 6th Intl. Qualitative Reasoning Workshop, Heriot Watt, 1992.

Programme Committee Member, Fifth Int. Conf on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems (IAE/AIE 92), Paderborn, 1992

Programme Committee Member, World congress: intelligent manufacturing technology and systems, Yugoslavia, 1992

Programme Committee Member, Int. Workshop on Model Based Reasoning, Vienna, 1992.

Programme Committee Member, 12th Int Conference on AI and Expert Systems, Avignon 1992

Member of local organising committee European Conference on AI, ECAI92, Vienna.

Member Scientific Committee, ACAI93, Capri.

Member of International Joint Conference on AI (IJCAI) Advisory Board, for IJCAI93.

Programme Committee Member, 13th Int. Conference on AI and Expert Systems, Avignon 1993

Programme Committee Member, 4th International Conference on Knowledge Representation and Reasoning, KR94.

Programme Committee Member, AAAI94 workshop on Spatial and Temporal Reasoning, Seattle, August 1994

Programme Committee Member, Conference on Automated Deduction (CADE), Nancy, July 1994

Programme Committee Member, 5th Toulouse International Workshop TIME, SPACE and MOVEMENT, Toulouse, June 1995.

Scientific Committee Member, COSIT95, Semmering, Austria, September 1995.

Programme Committee Member, FAPR - 96, 1st International conference on Formal and Applied Practical Reasoning, Bonn, 1996.

Programme Committee Member, IEA-AIE96 - 96, Ninth International Conference on Industrial and Engineering Applications of AI and Expert Systems, Fukuoka, Japan, June 1996

Programme Committee Member, ECAI 96, Budapest, August 1996

Programme Committee Member, CADE 96, Conference on Automated Deduction, New Brunswick, 1996

Programme Committee Member and organizer, AAAI Spring Symposium on Spatial Expressions, 1996

Programme Committee Member AISB Symposium on Automated Reasoning (Sussex 96)

Programme Committee Member Symposium on Data Handling (SDH-96, Delft)

Programme Committee Member International Joint Conference on Qualitative & Quantitative Practical Reasoning (ECSQARU/FAPR-97, Bad Honnef, Germany)

Programme Committee Member AISB Symposium on Automated Reasoning (Manchester 97)

Programme Committee Member Conference on Spatial Information Theory (COSIT-97, Pittsburgh)

Programme Committee Member Commonsense-98 (London)

Programme Committee Member First conference on Formal Ontology and Information Systems (FOIS'98), Trento, Italy.

Programme Committee Member Conference on Spatial Information Theory, COSIT-99, Stade, Germany September 1999.

Programme Committee Member AI and Maths 2000, Florida.

Programme Committee Member GIScience2000, Savannah, USA

Advisory committee of the Mexican AI conference, MICAI 2000

Programme Committee Member Formal Ontology and Information Systems (FOIS'01), Maine, October 2001

Advisory Board Member, KR'02

Programme Committee Member Conference on Spatial Information Theory, COSIT-03, Switzerland, September 2003.

Steering Committee Member, Cosit Conference Series, 2003 -

Programme Committee Member International Conference on Knowledge Representation and Reasoning, KR'04, Canada, June 2004

Programme Committee Member Formal Ontology and Information Systems (FOIS'04), Turin, October 2004.

Advisory Board Member, KR'04

Programme Committee Member Third International Conference on Geographic Information Science (GIScience'04, Maryland, USA)

Programme Committee Member Spatial Cognition 04 (Frauenchiemsee Island, Bavaria, Germany)

Advisory Board member ECAI 2006, Italy.

Programme Committee Member Formal Ontology and Information Systems (FOIS'06), Baltimore, 2006.

Programme Committee Member American Association for Artificial Intelligence Conference, AAAI-06, Boston, 2006.

Programme Committee Member International Cognitive Vision Workshop 2006, Austria

Programme Committee Member GiScience, Muenster, 2006

Programme Committee Member Int. Symp. Practical Cognitive Agents and Robots (PCAR), Perth, 2006

Programme Committee Member Terra Cognita, Athens, Georgia, 2006

Programme Committee Member Commonsense'07, London, 2007

Member of organising committee, Talking about and perceiving moving objects: exploring the bridge between natural language, perception and formal ontologies of space, workshop at Spatial Cognition Conference, Bremen 2006

Programme Committee Member, MIWAI'08, Thailand

PC member of Spatial Cognition 20008, Freiburg, September 15-19, 2008.

PC member of FOIS 2008, the 5th International Conference on Formal Ontology in Information Systems, Saarbruecken, Germany, Oct 31st - Nov 3rd 2008

PC member of 16th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM GIS 2008), November 5-7, 2008, Irvine, CA, USA

Steering Committee of UKCRC Grand Challenge GC5: Architecture of Brain and Mind, April 2008- onwards.

Programme Committee Member Conference on Spatial Information Theory, COSIT-07, Melbourne, Australia, September 2007.

Programme Committee and Advisory Committee Member Conference on Spatial Information Theory, COSIT-09, Britanny, France, September 2009.

Programme Committee Member Spatial Cognition 2010 Programme Committee, Mount Hood, August 2010

Programme Committee Member PCAR-10: Third International Symposium on Practical Cognitive Agents and Robots, Perth 2010

Programme Committee Member CAS 2012: first international workshop on Cognitive Assistive Systems: Closing the Action-Perception Loop, Portugal, 2012

Member of Senior Advisory Committee, Commonsense Cognitive Robotics: Special Track at PRICAI 2014

Programme Committee Member, COSIT 15

Programme Committee Member, IJCAI-15 Video Track

IJCAI-16 Video track PC member

IJCAI-17 Workshop on Human-Robot Engagement in the Home, Workplace and Public Space PC member

COSIT-17 Steering Committee Member

IJCAI-17 Senior PC member

Founding member for the newly founded Steering Committee of the International Spatial Cognition Conferences, 2017, Chairman since 2019.

SpLU Programme Committee member, 2020

QR 2021 Programme Committee Member

Impact

The Region Connection Calculus (RCC), developed in collaboration with my students and research fellows, is now the most widely used mereotopological calculus within the field of AI. Following an earlier version in 1989, the version published in the KR'92 conference has now garnered some 1480 Google Scholar citations, with many hundreds more to subsequent journal and further conference papers. Researchers around the world have added to the knowledge concerning the calculus, and extending it in various ways. It has also been implemented in a wide variety of platforms and systems, including CYC (Cycorp Inc, USA) - a multi-million fact repository of commonsense knowledge and other ontologies ; SNARK (SRI USA) - a theorem prover that has been used in a variety of DARPA and other funded projects; PelletSpatial , a Description Logic/OWL reasoner for the de facto standard Protege ontology editor widely used for building ontologies for the semantic web; SPARQ.

A system to deliver online real time utility records based on work conducted in the VISTA and Mapping the Underworld projects has been launched in Scotland in March 2012 by the Scottish Road Works Register. Vault won the Built Environment category of the IET Innovation Awards in 2012 (also Highly commended in the IT category) and the 2012 NJUG Awards in the "Avoiding Damage" category. The Hades pilot system in London was based on Vault, which subsequently became part of a larger UK trial, the NUAR (National Underground Assets Register) organised by the Geogspatial Commission (part of the Cabinet Office).

PUBLICATIONS:

My publications according to Google Scholar can be found at: http://tinyurl.com/agc-pubs

Books:

1. A G Cohn and J R Thomas, *Artificial Intelligence and its Applications*, (eds), 291 pp, Wiley, Chichester, 1986.

2. H Mortimer, Logic of Induction, (translation editors A G Cohn & I D Craig), Ellis Horwood, Chichester, 182 pp, 1988.

3. A G Cohn, Proceedings of the Seventh Conference of the Society for the Study of Artificial Intelligence and Simulation of Behaviour, (editor), Pitman/Morgan Kaufmann, London/Los Altos, 233 pp, 1989

4. A G Cohn, Proc. 11th European Conference on AI, John Wiley, Chichester, 832 pp, 1994 (Editor)

5. A G Cohn, L Schubert, S Shapiro, (editors). Principles of Knowledge Representation and Reasoning: Proceedings of the 4th International Conference (KR98) Morgan Kaufman. 1998.

6. A G Cohn, F Giunchiglia and B Selman (editors) Principles of Knowledge Representation and Reasoning: Proceedings of the 7th International Conference (KR 2000), pp. 15-25 Morgan Kaufman. 2000.

7. A G Cohn and D M Mark (eds) ,Spatial Information Theory International Conference, COSIT 2005, Lecture Notes in Computer Science , 3693 , Springer, (2005).

Papers in Refereed Journals:

8. A G Cohn, Some Progress in Artificial Intelligence, *Journal of Electro Technology*, vol XXXI, pp 1-16, 1987

9. A G Cohn, A More Expressive Formulation of Many Sorted Logic, *Journal of Automated Reasoning*, vol 3, pp 113-200, 1987

10. A G Cohn, Taxonomic Reasoning with Many Sorted Logics, *Artificial Intelligence Review*, vol 3, pp 89-128, 1989.

11. A G Cohn, Approaches to Qualitative Reasoning, *Artificial Intelligence Review*, vol 3, pp 177-232, 1989.

12. D A Randell & A G Cohn, Exploiting Lattices in a Theory of Space and Time, *Computers and Mathematics with Applications*, vol 23(6-9) pp 459-476, 1992.

13. A G Cohn, Completing Sort Hierarchies, *Computers and Mathematics with Applications*, vol 23(6-9) pp 477-491, 1992.

14. A G Cohn, J M Gooday, B Bennett and N M Gotts, A logical approach to representing and reasoning about space, in special issue of *Artificial Intelligence Review* on Integration of Natural Language and Vision Processing, Volume 9(4-5), pp 255-259, 1995, (simultaneous publication of [283]).

15. A G Cohn, D A Randell & Z Cui, Taxonomies of Logically Defined Qualitative Spatial Relations, *International Journal of Human-Computer Studies*, vol 43, Issue 5-6, pp 831-846, 1995.

16. A G Cohn, The Challenge of Qualitative Spatial Reasoning, Special issue: Symposium on Artificial Intelligence, *ACM Computing Surveys*, vol. 27, pp. 223-325, September, 1995.

17. J M Gooday and A G Cohn, Using spatial logic to describe visual languages, in special issue of *Artificial Intelligence Review* on Integration of Natural Language and Vision Processing, Volume 10(1-2), pp. 171-186, 1996 (simultaneous publication of [284]).

18. N M Gotts, J M Gooday and A G Cohn, A Connection Based Approach to Common-Sense Topological Description and Reasoning, *The Monist*, Volume 79(1), pp 51-75, 1996.

19. A G Cohn, B Bennett, J Gooday, N M Gotts, Qualitative spatial representation and reasoning with the region connection calculus. *Geoinformatica*, vol. 1, pp. 1-44. 1997.

20. E Davis, N M Gotts, A G Cohn, Constraint networks of topological relations and convexity. *Constraints*, vol. 4, pp. 241-280. 1999.

21. A Isli, A G Cohn, A new approach to cyclic ordering of 2D orientations using ternary relation algebras, *Artificial Intelligence*, vol. 122, pp. 137-187. 2000.

22. J Fernyhough, A G Cohn, D C Hogg, Constructing qualitative event models automatically from video input, *Image and Vision Computing*, vol. 18, pp. 81-103. 2000.

23. A G Cohn, S M Hazarika, Qualitative spatial representation and reasoning: an overview, *Fundamenta Informaticae*, vol. 45, pp. 1-29. 2001.

24. B Bennett, A G Cohn, F Wolter, M Zakharyaschev, Multi-dimensional modal logic as a framework for spatio-temporal reasoning, *Applied Intelligence*, vol. 17, pp. 239-251. 2002.

25. M Cristani, A G Cohn, SpaceML: a mark-up language for spatial knowledge, *Journal of Visual Languages and Computing*, vol. 13, pp. 97-116. 2002.

26. S Wright, N J Ward, A G Cohn, Enhanced presence in driving simulators using autonomous traffic with virtual personalities, *Presence: Teleoperators and Virtual Environments*, vol. 11, pp. 578-590. 2002.

27. A G Cohn, A C Varzi, Mereotopological connection, *Journal of Philosophical Logic*, vol. 32, pp. 357-390. 2003.

28. C. Needham, P. Santos, D. R. Magee, V. Devin, D. C. Hogg and A. G. Cohn, Protocols from Perceptual Observations, Artificial Intelligence, 167 , pp 103-136, (2005).

29. B Bennett, A G Cohn and D R Magee, Enforcing global spatio-temporal consistency to enhance reliability of moving object tracking and classification. Kuenstliche Intelligenz, vol. 2/2005, pp. 32-35. 2005.

30. Representing Moving Objects in Computer-Based Expert Systems: The Overtake Event Example N. Van de Weghe, A. G. Cohn, P. De Maeyer and F. Witlox Expert Systems with Applications, 29 (4), pp 977-983, (November 2005).

31. N. Van de Weghe, A. G. Cohn, G. De Tre and P. De Maeyer, A Qualitative Trajectory Calculus as a Basis for Representing Moving Objects in Geographical Information Systems, Cybernetics and Control, vol. 35, pp. 97-119. 2006.

32. Enhanced tracking and recognition of moving objects by reasoning about spatio-temporal continuity, Brandon Bennett, Derek Magee, Anthony Cohn and David Hogg, Image and Vision Computing, vol. 26, pp. 67-81. 2008.

33. Alexander C. D. Royal, Phil R. Atkins, Michael J. Brennan, David N. Chapman, Huanhuan Chen, Anthony G. Cohn, Kae Y. Foo, Kevin F. Goddard, Russell Hayes, Tong Hao, Paul L. Lewin, Nicole Metje, Jen M. Muggleton, Adham Naji, Giovanni Orlando, Steve R. Pennock, Miles A. Redfern, Adrian J. Saul, Steve G. Swingler, Ping Wang, and Christopher D. F. Rogers, Site Assessment of Multiple-Sensor Approaches for Buried Utility Detection, International Journal of Geophysics, vol. 2011, Article ID 496123, 19 pages, 2011. doi:10.1155/2011/496123

34. Implementing a qualitative calculus to analyse moving point objects, M. Delafontaine, A. G. Cohn and N. V. Weghe , Expert Systems with Applications, 38 (5), pp 5187-5196, 2011.

35. Inferring additional knowledge from QTC_N relations, M. Delafontaine, P. Bogaert, A. G. Cohn, F. Witlox, P. D. Maeyer and N. V. Weghe, Inf. Sci., 181 (9), pp 1573-1590, 2011

36. Ronald Denaux, Catherine Dolbear, Glen Hart, Vania Dimitrova and Anthony Cohn, Supporting domain experts to construct conceptual ontologies: A holistic approach in Journal of Web Semantics: Science, Services and Agents on the World Wide Web, vol 9., no. 2, pp. 113-127, Jul. 2011

37. Hao, T., Rogers, C. D. F., Metje, N., Chapman, D. N., Muggleton, J. M., Foo, K. Y., Wang, P., Pennock, S. R., Atkins, P. R., Swingler, S. G., Parker, J., Costello, S. B., Burrow, M. P. N., Anspach, J. H., Armitage, R. J., Cohn, A. G., Goddard, K. F., Lewin, P. L., Orlando, G., Redfern, M. A., Royal, A. C. D. and Saul, A. J. (2012) Condition assessment of the buried utility service infrastructure. Tunnelling and Underground Space Technology, 28 (1). pp. 331-344. ISSN 0886-7798

38. Rogers, C. D. F., Hao, T., Costello, S. B., Burrow, M. P. N., Metje, N., Chapman, D. N., Parker, J., Armitage, R. J., Anspach, J. H., Muggleton, J. M., Foo, K. Y., Wang, P., Pennock, S. R., Atkins, P. R., Swingler, S. G., Cohn, A. G., Goddard, K., Lewin, P. L., Orlando, G., Redfern, M. A., Royal, A. C. D. and Saul, A. J. (2012) Condition assessment of the surface and buried infrastructure – A proposal for integration. Tunnelling and Underground Space Technology, 28 (1). pp. 202-211. ISSN 0886-7798

39. Hannah M. Dee, Anthony G. Cohn, David C. Hogg, Building semantic scene models from unconstrained video, Computer Vision and Image Understanding, Volume 116, Issue 3, March 2012, Pages 446-456, ISSN 1077-3142, 10.1016/j.cviu.2011.09.005.

40. Reasoning with Topological and Directional Spatial Information, S. Li and A. G. Cohn, Computational Intelligence, 28(4): 579-616, 2012

41. Dutta, Ritaban, Cohn, Anthony G, Muggleton, Jen M, 3D Mapping of Buried Underworld Infrastructure Using Dynamic Bayesian Network Based Multi-Sensory Image Data Fusion, Journal of Applied Geophysics, Volume 92, May 2013, Pages 8 - 19.

42. A survey of qualitative spatial representations, Juan Chen, Anthony G. Cohn, Dayou Liu, Shengsheng Wang, Jihong Ouyang and Qiangyuan Yu, Knowledge Engineering Review 30(1): 106-136 (2015)

43. Reasoning about Topological and Cardinal Direction Relations between 2-Dimensional Spatial Objects, A G Cohn, S Li, W Liu, J Renz, Journal of Artificial Intelligence Research, 493-532, 2014

44. Airborne Laser Scanning for the Detection of Archaeological Vegetation Marks Using Biomass as a Proxy, David Stott, Doreen S. Boyd, Anthony Beck and Anthony Cohn, Remote Sensing, 7(2), 1594-1618. doi:10.3390/rs70201594, 2015

45. Learning Relational Event Models from Video, K S R Dubba, A G Cohn, D C Hogg, M Bhatt, F Dylla, Journal of Artificial Intelligence Research, vol 53, pp 41-115, 2015.

46. Gabriele Bleser, Dima Damen, Ardhendu Behera, Katharina Mura, Markus Miezal, Andrew Gee, Gustaf Hendeby, , Gustavo Macaes, Hugo Domingues, Dominic Gorecky, Luis Almeida, Walterio Mayol-Cuevas, Andrew Calway, Anthony G. Cohn, David C. Hogg, Didier Stricker, Cognitive Learning, Monitoring and Assistance of Industrial Workflows using Egocentric Sensor Networks, PLOS ONE, 10(6).

47. Dou, Q., Wei, L., Magee, D., and Cohn, A. (2017). Real-Time Hyperbolae Recognition and Fitting in GPR Data. IEEE Transactions on Geoscience and Remote Sensing, 55(1), 51-62.

48. Gu, F., Sridhar, M., Cohn, A., Hogg, D., Florez-Revuelta, F., Monekosso, D., and Remagnino, P. (2016). Weakly supervised activity analysis with spatio-temporal localisation. Neurocomputing, 216, 778-789. doi:10.1016/j.neucom.2016.08.032

49. Dou, Q., Wei, L., Magee, D. R., Atkins, P. R., Chapman, D. N., Curioni, G., . . . Cohn, A. G. (2016). 3D Buried Utility Location Using A Marching-Cross-Section Algorithm for Multi-sensor Data Fusion. Sensors, 16(11). doi:10.3390/s16111827

50. Bilal, Muhammad; Khan, Wasiq; Muggleton, Jennifer; Rustighi, Emiliano; Jenks, Hugo; Pennock, Steve R; Atkins, Phil R; Cohn, Anthony; Inferring the most probable maps of underground utilities using Bayesian mapping model, Journal of Applied Geophysics 150, 52-66 2018 Elsevier

51. Wei, Lijun; Magee, Derek R; Cohn, Anthony G; An anomalous event detection and tracking method for a tunnel look-ahead ground prediction system Automation in Construction 91 216-225 2018 Elsevier

52. Jiang, Bingbing; Li, Zhengyu; Chen, Huanhuan; Cohn, Anthony G; Latent topic text representation learning on statistical manifolds, IEEE transactions on neural networks and learning systems, 29(11), 5643-5654, 2018, IEEE

53. Peel, H; Luo, S; Cohn, AG; Fuentes, R; Localisation of a mobile robot for bridge bearing inspection, Automation in Construction, 94, 244-256, 2018, Elsevier

54. Forbus, Kenneth; Gentner, Dedre; Levine, Susan; Cohn, Anthony; The roles of multimodality in spatializing reasoning and learning Cognitive Processing, 19, S13-S14 2018, Springer

55. Alomari, Muhannad; Hogg, David; Cohn, Anthony; Natural language learning and grounding for robotic systems Cognitive Processing 19 Suppl 1 S14-S15 2018 Springer Nature

56. Duckworth, Paul; Hogg, David C; Cohn, Anthony G; Unsupervised human activity analysis for intelligent mobile robots Artificial Intelligence 270 67-92 2019 Elsevier

57. Abdellatif, Mohamed; Peel, Harriet; Cohn, Anthony G; Fuentes, Raul; Hyperspectral imaging for autonomous inspection of road pavement defects Proceedings of the 36th International Symposium on Automation and Robotics in Construction (ISARC) 384-392 2019 International Association for Automation and Robotics in Construction

58. Wei, Lijun; Khan, Muhammad; Mehmood, Owais; Dou, Qingxu; Bateman, Carl; Magee, Derek R; Cohn, Anthony G; Web-based visualisation for look-ahead ground

imaging in tunnel boring machines, Automation in Construction 105 102830 2019 Elsevier

59. Dimitrova, Vania; Mehmood, Muhammad Owais; Thakker, Dhavalkumar; Sage-Vallier, Bastien; Valdes, Joaquin; Cohn, Anthony G; An ontological approach for pathology assessment and diagnosis of tunnels , Engineering Applications of Artificial Intelligence 90 103450 2020 Pergamon

60. Abdellatif, M.; Peel, H.; Cohn, A.G.; Fuentes, R. Pavement Crack Detection from Hyperspectral Images Using a Novel Asphalt Crack Index. Remote Sens. 2020, 12, 3084

61. Dou, Qingxu; Lin, Zhiyuan; Magee, Derek R; Cohn, Anthony G; 3D mapping from partial observations: An application to utility mapping Automation in Construction 117 103229 2020 Elsevier

62. Wei, Lijun; Du, Heshan; Mahesar, Quratul-ain; Al Ammari, Kareem; Magee, Derek R; Clarke, Barry; Dimitrova, Vania; Gunn, David; Entwisle, David; Reeves, Helen; A decision support system for urban infrastructure inter-asset management employing domain ontologies and qualitative uncertainty-based reasoning Expert Systems with Applications 113461 2020 Pergamon, 2020

63. Papallas, Rafael; Cohn, Anthony G; Dogar, Mehmet R; Online Replanning with Human-in-The-Loop for Non-Prehensile Manipulation in Clutter—A Trajectory Optimization based Approach IEEE Robotics and Automation Letters 2020 IEEE

64. Liu B, Ren Y, Liu H, Xu H, Wang Z, Cohn AG, Jiang P. GPRInvNet: Deep Learning-Based Ground-Penetrating Radar Data Inversion for Tunnel Linings. IEEE Transactions on Geoscience and Remote Sensing. 2021.

65. L. F. C. Figueredo, R. C. Aguiar, L. Chen, S. Chakrabarty, M. R. Dogar and A. G. Cohn Human comfortability: Integrating ergonomics and muscular-informed metrics for manipulability analysis during human-robot collaboration, IEEE Robotics and Automation Letters 6.2 (2020): 351-358

66. Mohamed Abdellatif, Harriet Peel, Anthony G. Cohn, Raul Fuentes, Combining block-based and pixel-based approaches to improve crack detection and localisation, Automation in Construction, Volume 122, 2021, 103492

67. Akhtiamov, D., Cohn, A.G. and Dabaghian, Y. Spatial representability of neuronal activity. Science Reports, 11, 20957 (2021).

68. Jiayao Chen, Hongwei Huang, Anthony G. Cohn, Dongming Zhang, Mingliang Zhou, Machine learning-based classification of rock discontinuity trace: SMOTE oversampling integrated with GBT ensemble learning, International Journal of Mining Science and Technology, 2021, ISSN 2095-2686

69. Brown, P., Dimitrova, V., Hart, G., Cohn, A., and Moura, P. (2021). Refactoring the Whitby Intelligent Tutoring System for Clean Architecture. Theory and Practice of Logic Programming, 21(6), 818-834.

70. Jiayao Chen, Yifeng Chen, Anthony G. Cohn, Hongwei Huang, Jianhong Man, Lijun Wei, A novel image-based approach for interactive characterization of rock fracture spacing in a tunnel face, Journal of Rock Mechanics and Geotechnical Engineering, 2022

71. Muhannad Alomari, Fangjun Li, David C. Hogg, Anthony G. Cohn, Online perceptual learning and natural language acquisition for autonomous robots, Artificial Intelligence, Volume 303, 2022, 103637, ISSN 0004-3702

72. Jing Wang, Jiaqi Zhang, Anthony G. Cohn, Zhengfang Wang, Hanchi Liu, Wenqiang Kang, Peng Jiang, Fengkai Zhang, Kefu Chen, Wei Guo, Yanfei Yu, Arbitrarily-oriented tunnel lining defects detection from Ground Penetrating Radar images using deep Convolutional Neural networks, Automation in Construction, Volume 133, 2022, 104044

73. Jiang, Bingbing, Xingyu Wu, Xiren Zhou, Yi Liu, Anthony G. Cohn, Weiguo Sheng, and Huanhuan Chen. Semi-Supervised Multiview Feature Selection With Adaptive Graph Learning, IEEE Transactions on Neural Networks and Learning Systems (2022).

74. Senlin Yang, Zhengbfang Wang, Jing Wang, Anthony G. Cohn, Jiaqi Zhang, Peng Jiang, Lichao Nie, Qingmei Sui, Defect segmentation: Mapping tunnel lining internal defects with ground penetrating radar data using a convolutional neural network, Construction and Building Materials, Volume 319, 2022, 125658

75. Toumpa A, Cohn AG. Object-agnostic Affordance Categorization via Unsupervised Learning of Graph Embeddings. Journal of Artificial Intelligence Research. 2023;77:1-38, 2023

76. Adam Richard-Bollans, Lucía Gómez Álvarez, Anthony G. Cohn, Identifying and modelling polysemous senses of spatial prepositions in referring expressions, Cognitive Systems Research, Volume 77, 2023, Pages 45-61

77. James L Crowley, Joëlle Coutaz, Jasmin Grosinger, Javier Vazquez-Salceda, Cecilio Angulo, Alberto Sanfeliu, Luca Iocchi, Anthony G Cohn, A Hierarchical Framework for Collaborative Artificial Intelligence, IEEE Pervasive Computing, vol. 22, no. 1, pp. 9-18, 1 Jan.-March 2023

78. A Logic of East and West, H Du, N Alechina, A Farjudian, B Logan, C Zhou, AG Cohn, Journal of Artificial Intelligence Research 76, 527-565

79. Heshan Du, Lijun Wei, Vania Dimitrova, Derek Magee, Barry Clarke, Richard Collins, David Entwisle, Mehran Eskandari Torbaghan, Giulio Curioni, Ross Stirling, Helen Reeves, Anthony G. Cohn, City infrastructure ontologies, Computers, Environment and Urban Systems, Volume 104, 2023,101991

80. B Liu, P Jiang, Q Wang, Y Ren, S Yang, AG Cohn, Physics-driven self-supervised learning system for seismic velocity inversion, Geophysics 88 (2), R145-R161, 2023,

81. Ryan Burnell, Wout Schellaert, John Burden, Tomer D. Ullman, Fernando Martinez-Plumed, Joshua B. Tenenbaum, Danaja Rutar, Lucy G. Cheke, Jascha Sohl-Dickstein, Melanie Mitchell, Douwe Kiela, Murray Shanahan, Ellen M. Voorhees, Anthony G. Cohn, Joel Z. Leibo, Jose Hernandez-Orallo, Rethink reporting of evaluation results in AI. Science, 380(6641), pp.136-138, 2023

82. Su, Hai-Long and Li, Zhi-Peng and Zhu, Xiao-Bo and Yang, Li-Na and Gribova, Valeriya and Filaretov, Vladimir Fedorovich and Cohn, Anthony G. and Huang, De-Shuang, Hierarchical Graph Neural Network Based on Semi-Implicit Variational Inference, in IEEE Transactions on Cognitive and Developmental Systems, vol. 15, no. 2, pp. 887-895, June 2023

83. Dwivedi, Y.K., Hughes, L., Bhadeshia, H.K., Ananiadou, S., Cohn, A.G., Cole, J.M., Conduit, G.J., Desarkar, M.S. and Wang, X., 2023. Artificial intelligence (AI) futures: India-UK collaborations emerging from the 4th Royal Society Yusuf Hamied workshop. International Journal of Information Management, p.102725.

84. Clementini, E. and Cohn, A.G., 2024. Extension of RCC*-9 to Complex and Three-Dimensional Features and Its Reasoning System. ISPRS International Journal of Geo-Information, 13(1), p.25.

Contributions to Professional Journals:

85. Royal, A.C.D., Rogers, C.D.F., Chapman, D.N., Metje, N., Atkins, P.R., Brennan, M.J., Muggleton, J.M., Cohn, A.G., Swingler, S.G., Pennock, S.R., Redfern, M.A., Saul, A.J. Mapping the Underworld meets Subsurface Utility Engineering, GEOConnexionUK, June/July, Volume 8, issue 3, 2010

86. Royal, A.C.D., Rogers, C.D.F., Atkins, P.R., Brennan, M.J., Chapman, D.N., Chen, H., Cohn, A.G., Curioni, G., Foo, K.Y., Goddard, K., Hao, T., Lewin, P.L., Metje, N., Muggleton, J.M., Naji, A., Pennock, S.R., Redfern, M.A., Saul, A.J., Swingler, S.G. and Wang, P. Mapping the Underworld: Location, Mapping and Positioning without Excavation, Climate Control Middle East, July 2010,

87. Hawes, N., Burbridge, C., Jovan, F., Kunze, L., Lacerda, B., Mudrova, L., Lacerda,B, Mudrová, L, Young J, Wyatt J, Hebesberger, D, Koertner, T, Ambrus, R, Bore, N, Folkesson, J, Jensfelt, P, Beyer, L, Hermans, A, Leibe, B, Aldoma, A, Faeulhammer, T, Zillich, M, Vincze, M, Chinellato, E, Al-Omari, M, Duckworth, P, Gatsoulis,

Y, Hogg, D C, Cohn, A G, Dondrup, C Pulido Fentanes, J, Krajník T, Santos, J M, Duckett, T and Hanheide, M. (2017). The STRANDS Project: Long-Term Autonomy in Everyday Environments, IEEE Robotics and Automation Magazine, September 2017, pp 146-156

Other Contributions to Journals:

88. A M Frisch & A G Cohn, Thoughts and Afterthoughts on the 1988 AAAI Workshop on Hybrid Reasoning, AI Magazine, vol 11(5), pp 77-83 1990.

89. Royal, A.C.D, Rogers, C.D.F., Atkins, P., Brennan, M., Chapman, D., Cohn, A., Lewin, P., Metje, N., Muggleton, J., Pennock, S., Redfern, M.A,. Saul, A. and Swingler, S. (2010). Briefing: Stakeholder Perspectives of Buried Utility Mapping. Municipal Engineer 163 Issue ME1, p3 - 7. ISSN: 0965-0903, E-ISSN: 1751-7699. DOI: http://dx.doi.org/10.1680/muen.2010.163.1.3

Refereed Articles in Published Conference and Workshop Proceedings:

90. A G Cohn, Mechanising a Particularly Expressive Many Sorted Logic, *Proc IJCAI 6*, Morgan Kaufmann, Los Altos, pp 162-164, 1979

91. A G Cohn, Improving the Expressiveness of Many Sorted Logic, *Proc AAAI-83*, Morgan Kaufmann, Los Altos, pp 84-87, 1983

92. A G Cohn, On the Solution of Schubert's Steamroller in Many Sorted Logic, *Proc IJCAI 9*, Morgan Kaufmann, Los Altos, pp 1169-1174, 1985

93. A G Cohn, Deep Knowledge Representation Techniques, *Expert Systems 85*, (ed) M Merry, Cambridge University Press, Cambridge, pp 299 - 306, 1985

94. A G Cohn, Many Sorted Logic = Unsorted Logic + Control?, *Expert Systems 86*, (ed) M A Bramer, Cambridge University Press, Cambridge, pp 184 - 194, 1986

95. A G Cohn, On the appearance of sortal literals: a non substitutional framework for hybrid reasoning, *Principles of Knowledge Representation and Reasoning*, R Brachman, H Levesque & R Reiter (eds), Morgan Kaufmann, Los Altos, pp 357-368, 1989

96. D A Randell & A G Cohn, Modelling Topological and Metrical Properties in Physical Processes, *Principles of Knowledge Representation and Reasoning*, R Brachman, H Levesque & R Reiter (eds), Morgan Kaufmann, Los Altos, pp 55-66, 1989

97. J R Thomas & A G Cohn, An expert system for hollow extrusion die design, *Proc Artificial Intelligence and Expert Systems in Manufacturing*, IFS, Kempston, pp 307-314, 1990 (also appears as Report RR150, Dept Computer Science, University of Warwick).

98. D A Randell, A G Cohn and Z Cui, Computing Transitivity Tables: a Challenge for Automated Theorem Provers, Proc. CADE 11, Springer Verlag, pp 786 - 790, 1992.

99. Z Cui, A G Cohn and D A Randell, Qualitative Simulation based on a Logical Formalism of Space and Time, Proc. AAAI-92, AAAI Press, Menlo Park, California, pp 679 – 684, 1992 .

100. A G Cohn, A Many Sorted Logic with Possibly Empty Sorts, Proc. CADE 11, Springer Verlag, pp 633 - 647, 1992.

101. A M Frisch and A G Cohn, An Abstract View of Sorted Unification, Proc. CADE 11, Springer Verlag, pp 178 - 192, 1992.

102. G Kelleher and A G Cohn, Automatically Synthesising Domain Constraints from Operator Descriptions, Proc ECAI, John Wiley, Chichester, pp 653-655, 1992.

103. D A Randell, A G Cohn and Z Cui, An Interval Logic for Space based on "Connection", Proc ECAI, John Wiley, Chichester, pp 394-398, 1992.

104. D A Randell, Z Cui and A G Cohn, A Spatial Logic based on Regions and Connection, in Proc 3rd Int. Conf on Knowledge Representation and Reasoning, Boston, pp 165 – 176, Morgan Kaufmann, San Mateo, 1992.

105. Z Cui, A G Cohn and D A Randell, Qualitative and Topological Relationships in Spatial Databases, in Advances in Spatial Databases, Lecture Notes in Computer Science No. 692, ed D Abel and B C Ooi, Springer Verlag, Berlin, pp 296-315, 1993

106. F Lehmann and A G Cohn, The Egg/Yolk Reliability Hierarchy: Data Translation and Model Integration Using Ordered Sorts with Prototypes, Proc 3rd Int Conf. on Knowledge Management (CIKM94), Gaithersburg, Maryland, ACM Press, pp 272-279, 1994.

107. A G Cohn and N M Gotts, Spatial Regions with Undetermined Boundaries, In: N Pissinou and K Makki (eds) Proceedings of the Second ACM Workshop on Advances in Geographic Information Systems, ACM Press, pp. 52-59, 1994

108. A G Cohn, A Hierarchical Representation of Qualitative Shape based on Connection and Convexity, *in* Spatial Information Theory: a theoretical basis for GIS, Proc. COSIT95, ed A Frank & W Kuhn, Springer Verlag, LNCS, pp 311-326,September 1995

109. A G Cohn, N M Gotts, Representing spatial vagueness : a mereological approach in: Principles of Knowledge Representation and Reasoning: Proceedings of the 5th International Conference (KR96), pp. 230-241 Morgan Kaufman. 1996.

110. J M Gooday, A G Cohn, Transition-based qualitative simulation in: Proceedings of the 10th International Workshop on Qualitative Reasoning, pp. 74-82 AAAI Press. 1996.

111. A G Cohn, N M Gotts, The 'egg-yolk' representation of regions with indeterminate boundaries in: Burrough, P & Frank, A M (editors) Proceedings GISDATA Specialist Meeting on Spatial Objects with Undetermined Boundaries, pp. 171-187 Francis Taylor. 1996.

112. J H Fernyhough, A G Cohn, D C Hogg, Qualitative reasoning for automated traffic surveillance in: Proceedings of the 10th International Workshop on Qualitative Reasoning, pp. 40-42 AAAI Press. 1996.

113. J H Fernyhough, A G Cohn, D C Hogg, . Generation of semantic regions from image sequences in: Buxton, B & Cipolla, R (editors) Computer Vision ECCV'96, pp. 475-478 Springer-Verlag. 1996.

114. A G Cohn, B Bennett, J M Gooday, N M Gotts, Representing and reasoning with qualitative spatial relations about regions in: Stock, O (editors) Spatial and Temporal Reasoning, pp. 97-134 Kluwer Academic Publishers. 1997.

115. B Bennett, A G Cohn, A Isli, A logical approach to incorporating qualitative spatial reasoning in: Hirtle, S C & Frank, A U (editors) Spatial Information Theory: A Theoretical Basis for GIS, pp. 503-504 Springer-Verlag. 1997.

116. B Bennett, A G Cohn, A Isli, Combining multiple representations in a spatial reasoning system in: Proceedings of the 9th IEEE International Conference on Tools with Artificial Intelligence - ICTAI'97, pp. 314-322. 1997.

117. J H Fernyhough, A G Cohn, D C Hogg, Building qualitative event models automatically from visual input in: 6th IEEE International Conference on Computer Vision (ICCV'98), pp. 350-355 IEEE Computer Society Press. 1998.

118. A G Cohn, A Varzi, Connection relations in mereotopology in: Prade, H (editors) Proceedings of ECAI'98, pp. 150-154 John Wiley & Sons. 1998.

119. A Isli, A G Cohn, Qualitative spatial reasoning a la Allen: an algebra for cyclic ordering of 2D orientations in: Feng Zhao and Yip, Kenneth (editors) Qualitative Reasoning: the Twelfth International Workshop, AAAI Technical Report WS-98-01, pp. 65-76 AAAI Press. 1998.

120. A Isli, A G Cohn, An algebra for cyclic ordering of 2D orientations in: Proceedings of the 15th American Conference on Artificial Intelligence (AAAI), pp. 643-649 AAAI Press. 1998.

121. B Bennett, A Isli, A G Cohn, A system handling RCC-8 queries on 2D regions representable in the closure algebra of half-planes in: Proceedings of the 11th International Conference on Industrial and Engineering Applications of Artificial Intelligence & Expert Systems (IEA-AIE), pp. 281-290 Springer-Verlag. 1998.

122. A G Cohn, A C Varzi, Modes of connection, in: Spatial Information Theory - Cognitive and Computational Foundations of Geographic Information Science, pp. 299-314 Springer-Verlag. 1999.

123. B Bennett, A G Cohn, Consistency of topological relations in the presence of convexity constraints in: IJCAI-99 Workshop on Hot Topics in Spatial and Temporal Reasoning. 1999.

124. B Bennett, A G Cohn, Multi-dimensional multi-modal logics as a framework for spatio-temporal reasoning in: IJCAI-99 Workshop on Hot Topics in Spatial and Temporal Reasoning. 1999.

125. M Cristani, B Bennett, A G Cohn, Spatial locations via morpho-mereology in: Cohn AG, Giunchiglia F and Selman B (editors) Principles of Knowledge Representation and Reasoning: Proceedings of the 7th International Conference (KR 2000), pp. 15-25 Morgan Kaufman. 2000.

126. B Bennett, A G Cohn, P Torrini, S M Hazarika, Describing rigid body motions in a qualitative theory of spatial region in: Proceedings AAAI-2000 - the 17th National Conference on Artificial Intelligence, pp. 503-509 AAAI Press. 2000.

127. B Bennett, A G Cohn, P Torrini, S M Hazarika, A foundation for region-based qualitative geometry in: Proceedings of the 14th European Conference on Artificial Intelligence, pp. 204-208 IOS Press. 2000.

128. S Wright, A G Cohn, N J Ward, DRIVERSIM: a probabilistic approach to realistic traffic generation in: Driving Simulation Conference, pp. 267-274. 2000.

129. A G Cohn, S M Hazarika, Continuous transitions in mereotopology in: Proceedings of Common Sense 2001, Fifth Symposium on Logical Formalizations of Commonsense Reasoning. 2001.

130. S M Hazarika, A G Cohn, Qualitative spatio-temporal continuity in: Montello, D R (editors) Spatial Information Theory: Foundations of Geographic Information Science; Proceedings of COSIT'01, pp. 92-107 Springer-Verlag. 2001.

131. A G Cohn, Formalising bio-spatial knowledge in: Welty, C. & Smith, B (editors) Proceedings of the 2nd International Conference on Formal Ontology in Information Systems (FOIS'01), pp. 198-209 ACM Press. 2001.

132. S M Hazarika, A G Cohn, Abducing qualitative spatio-temporal histories from partial observations in: Fensel, D, Guinchiglia, F, McGuinness, D & Williams, M-A (editors) Principles of Knowledge Representation and Reasoning: Proceedings of the Eighth International Conference (KR2002), pp. 14-25 Morgan Kaufman. 2002.

133. A Galata, A G Cohn, D Magee, D C Hogg, Modeling interaction using learnt qualitative spatio-temporal relations and variable length Markov models in: van Harmelen, F (editors) Proceedings of the 15th European Conference on Artificial Intelligence (ECAI'02), pp. 741-745. 2002.

134. Van de Weghe, Nico; Cohn, Anthony G; Bogaert, Peter; De Maeyer, Philippe. Representation of moving objects along a road in: Proceedings of the 12th International Conference on Geoinformatics - Geospatial Information Research: Bridging the Pacific and Atlantic, pp. 187-194. 2004.

135. Bennett B., Magee D., Cohn A.G., and Hogg D.C. Using Spatio-temporal Continuity Constraints to Enhance Visual Tracking of Moving Objects, Proc. European Conference on Artificial Intelligence, pp. 922-926 IOS Press, 2004.

136. Santos P., Magee D., and Cohn A.G. Combining Multiple Answers for Learning Mathematical Structures from Visual Observation, Proc. European Conference on Artificial Intelligence, pp. 544-548 IOS Press. 2004.

137. Cohn, A G; Hogg, D C; Bennett, B; Devin, V; Galata, A; Magee, D R; Needham, C; Santos, P. Cognitive vision: integrating symbolic qualitative representations with computer vision in: Christensen, H I and Nagel, H-H (editors) Cognitive Vision Systems: Sampling the Spectrum of Approaches, pp. 221-246 Springer. 2006.

138. Qayyum, Z U; Cohn, A G. A comparison of qualitative and quantitative approaches to semantic scene modelling and retrieval in: Proceedings Twenty-Sixth SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence, AI-06. 2006.

139. Bogaert, P; Van de Weghe, N; Cohn, A G; Witlox, F; De Maeyer, P. Reasoning about moving point objects on networks in: Raubal, M, Miller, H J, Frank, A U and Goodchild, F (editors) 4th International Conference on Geographic Information Science (GIScience 2006). 2006.

140. Van de Weghe, N; Witlox, F; Cohn, A G; Neutens, T; De Maeyer, P. Efficient storage of interactive between multiple moving objects in: Proceedings of the 2nd International Workshop on Semantic-Based Geographical Information Systems Springer. 2006.

141. Qayyum, Z U; Cohn, A G. A spatio-temporal trajectory analysis and retrieval framework in: Proceedings of Thirteenth Portuguese Conference on Artificial Intelligence (EPIA'07).

142. Hickinbotham, S J; Cohn, A G. Knowledge-based recognition of utility map subdiagrams in: ICDAR 2007 Ninth International Conference on Document Analysis and Recognition (ICDAR'07), pp. 213-217 IEEE Computer Society Press. 2007.

143. Qayyum, Z U; Cohn, A G. Image retrieval through qualitative representations over semantic features in: Proceedings of the 18th British Machine Vision Conference (BMVC2007), pp. 610-619 BMVA. 2007.

144. Dabaghian, Y; Cohn, A G; Frank, L. Topological maps from signals in: Proceedings 15th ACM International Symposium on Advances in Geographic Information Systems (ACM GIS 2007), pp. 392-395 ACM Press. 2007. (This paper received the runner up prizes for the best poster and the best presented poster.)

145. Beck, A R; Fu, G; Cohn, A G; Bennett, B; Stell, J G. A framework for utility data integration in the UK in: Rumor, M., Coors, V., Fendel, E. M. and Zlatanova, S. (editors) Urban and Regional Data Management - UDMS 2007 Annual Taylor and Francis. 2007.

146. Van de Weghe, Nico; Bogaert, Peter; Cohn, Anthony G; Delafontaine, Matthias; De Temmerman, Leen; Neutens, Tijs; De Maeyer, Philippe; Witlox, Frank. How to handle incomplete knowledge concerning moving objects in: Proceedings Behaviour Monitoring and Interpretation Workshop at the 30th German Conference on Artificial Intelligence (KI-2007), pp. 91-101. 2007.

147. Denaux, Ronald; Holt, Ian; Dimitrova, Vania; Dolbear, Catherine; Cohn, Anthony. Supporting the construction of conceptual ontologies with the ROO tool in: Workshop on OWL: Experiences and Directions (OWLED2008).

148. Bogaert, P; Van de Weghe, N; Cohn, A G; Witlox, F; De Maeyer, P. The qualitative trajectory calculus on networks in: Barkowsky, Th, Knauff, M, Ligozat, G and Montello, D R (editors) Spatial Cognition V - Reasoning, Action, Interaction, pp. 20-38 Springer. 2008.

149. Dee, H M; Fraile, R; Hogg, D C; Cohn, A G. Modelling scenes using the activity within them, Proc. Spatial Cognition'08, Freiburg, Germany, 2008

150. Hippocampal Coding of Point-Free Topology, YA Dabaghian, AG Cohn and LM Frank, Proc. Computational and Systems Neuroscience, (COSYNE'08), Salt Lake City, 2008

151. Semantic Integration for Mapping the Underworld, Fu, G; Cohn, A G, Proceedings of Geoinformatics2008, Guanzhou, 2008

152. Beck, A; Cohn, A.G.; Sanderson, M; Ramage,S; Tagg,C; Fu,G; Bennett, B; Stell, J, UK Utility Data Integration: Overcoming Schematic Heterogeneity, Proceedings of GeoInformatics2008, Guanzhou, 2008

153. Hickinbotham, S, and Cohn, A G, Learning Spatial Grammars for Drawn Documents Using Genetic Algorithms, Proc HIS'08, Barcelona, pp 899-902, 2008.

154. Fu, G and Cohn, A G, Utility Ontology Development with Formal Concept Analysis, in Proc. FOIS, pp 297-310, 2008

155. Sridhar, M, Cohn, A G, Hogg, D C, Learning Functional Object-Categories from a Relational Spatio-Temporal Representation, in Proc. ECAI 08, pp 606 - 610, IOS Press, 2008

156. Utility Ontology Development with Formal Concept Analysis, Fu, G. and Cohn A. G in Proceedings of the 5th International Conference on Formal Ontology in Information Systems, pp.297-310, Germany, 2008

157. Roberto Fraile, David C. Hogg and Anthony G. Cohn, Motion Segmentation by Consensus Proceedings of ICPR, pp 1-4, http://dx.doi.org/10.1109/ICPR.2008.4760999, IEEE Computer Society, 2008

158. Simon J. Hickinbotham, Anthony G. Cohn, Learning Spatial Grammars for Drawn Documents Using Genetic Algorithms, Hybrid Intelligent Systems, International Conference on, pp. 899-902, 2008 Eighth International Conference on Hybrid Intelligent Systems, 2008, http://doi.ieeecomputersociety.org/10.1109/HIS.2008.54

159. Vania Dimitrova, Ronald Denaux, Glen Hart, Catherine Dolbear, Ian Holt and Anthony Cohn: Involving Domain Experts in Authoring OWL Ontologies at 7th International Semantic Web Conference, pp 1-16, 2008.

160. Motion segmentation by consensus, Roberto Fraile, David C. Hogg, Anthony G. Cohn, 19th International Conference on Pattern Recognition (ICPR 2008), December 8-11, 2008, Tampa, Florida, USA. IEEE 2008, ISBN 978-1-4244-2175-6

161. Ronald Denaux, Vania Dimitrova, Anthony G. Cohn, Catherine Dolbear, Glen Hart, Rabbit to OWL: Ontology Authoring with a CNL-Based Tool, Workshop on Controlled Natural Language (CNL 2009), 8-10 June 2009, Marettimo Island, Italy. Revised version forthcoming in Springer Lecture Notes in Computer Science Volume.

162. Dee, H. M., Hogg, D. C., and Cohn, A. G. Scene Modelling and Classification Using Learned Spatial Relations Springer LNCS (Conference on Spatial Information Theory (COSIT)) pp 295-311, l'Aber Wrac'h, France, September 2009.

163. Beck, A, Cohn, A.G., Parker, J., Boukhelifa, N. and Fu, G. Seeing the Unseen: delivering integrated underground utility data in the UK Proceedings of the GeoWeb conference, Vancouver, July 2009

164. Object Tracking and Primitive Event Detection by Spatio-Temporal Tracklet Association, Jiangfeng Wang, Maojun Zhang, Anthony G. Cohn, Proceedings of the Fifth International Conference on Image and Graphics, ICIG 2009, 457-462 , Xi'an, Shanxi, China, 20-23 September 2009. IEEE Computer Society 2009, ISBN 978-0-7695-3883-9

165. Chen, H. and Cohn, A.G. Probabilistic Conic Mixture Model and its Applications to Mining Spatial Ground Penetrating Radar Data, Proceedings of Workshops on Machine Learning and Data Mining for Sustainable Development in SIAM Conference on Data Mining, Columbus, April 2010

166. Towards Modelling the Intended Purpose of Ontologies: A Case Study in Geography - Ronald Denaux, Anthony Cohn, Vania Dimitrova and Glen Hart, Proc Terra Cognita 2009, Workshop, In Conjunction with the 8th International Semantic Web Conference, Washington, D.C., U.S.A.

167. Jorge Santos, Luis Braga, Anthony G Cohn, FONTE: A Protege Plugin for Engineering of Complex Ontologies by Assembling Modular Ontologies of Space, Time and Domain Concepts, ECEIS 2010, 12th International Conference on Enterprise Information Systems, 8 - 12 June, 2010 Funchal, Madeira - Portugal

168. Jorge Santos, Luis Braga, Anthony G Cohn, Engineering Time in an Ontology for Power Systems through the Assembling of Modular Ontologies, in Proc 7th Int. Conf. on Informatics in Control, Automation and Control, Funchal, Madeira, June 2010.

169. Engineering Complex Ontologies by Assembling Modular Ontologies of Space and Time, Jorge Santos, Luis Braga, and Anthony Cohn, Poster Paper at ESWC, Heraklion, 2010.

170. K Dubba, A G Cohn, D C Hogg, Event Model Learning from Complex Videos using ILP, in Proc. ECAI, pp 93-98, 2010.

171. M Sridhar, A G Cohn, D C Hogg, Unsupervised Learning of Event Classes from Video, Proc AAAI-10, 2010

172. Probabilistic Robust Hyperbola Mixture Model for Interpreting Ground Penetrating Radar Data, Huanhuan Chen and Anthony Cohn, in Proc. International Joint Conference on Neural Networks, Barcelona, 2010

173. Buried Utility Pipeline Mapping based on Street Survey and Ground Penetrating Radar, Huanhuan Chen and Anthony Cohn, in Proc. ECAI, 2010, pp 987-988

174. FONTE: A Protégé Plug-in for Engineering Complex Ontologies, Jorge Santos, Luis Braga and Anthony G. Cohn, Lecture Notes in Business Information Processing, 1, Volume 73, Enterprise Information Systems, Part 3, Pages 222-236, 2010

175. Rabbit to OWL: Ontology Authoring with a CNL-Based Tool, Ronald Denaux, Vania Dimitrova, Anthony G. Cohn, Catherine Dolbear and Glen Hart, in CONTROLLED NATURAL LANGUAGE, Lecture Notes in Computer Science, 2010, Volume 5972/2010, 246-264, DOI: 10.1007/978-3-642-14418-9_15

176. Mining Video Data: Learning about Activities , A G Cohn, in - Knowledge Science, Engineering and Management, Lecture Notes in Computer Science, vol 6291, Eds: Bi, Yaxin and Williams, Mary-Anne, 2010

177. Psychophysical Evaluation for a Qualitative Semantic Image Categorisation and Retrieval Approach, Z. Ul-Qayyum, A. G. Cohn and A. Klippel Trends in Applied Intelligent Systems: Proceedings of 23rd International Conference on Industrial, Engineering and Other Applied Intelligent Systems (IEA/AIE' 10), Part III, LNAI, 6098 , pp 321-331, Springer Verlag, (2010).

178. Muralikrishna Sridhar, Anthony G. Cohn, David C. Hogg: Relational Graph Mining for Learning Events from Video. STAIRS 2010: 315-327

179. Exploiting petri-net structure for activity classification and user instruction within an industrial setting, S Worgan, A Behera, A G Cohn and D C Hogg, ICMI, Alicante, 2011

180. From Video to RCC8: Exploiting a Distance Based Semantics to Stabilise the Interpretation of Mereotopological Relations M. Sridhar, A. G. Cohn and D. C. Hogg COSIT, edited by M. J. Egenhofer, N. A. Giudice, R. Moratz and M. F. Worboys, Lecture Notes in Computer Science, 6899 , pp 110-125, Springer, (2011) [Awarded Best Paper Prize]

181. Benchmarking Qualitative Spatial Calculi for Video Activity Analysis, M. Sridhar, A. G. Cohn and D. C. Hogg Proc. IJCAI Workshop Benchmarks and Applications of Spatial Reasoning, pp 15-20, (2011).

182. Huanhuan Chen, Anthony G. Cohn: Buried Utility Pipeline Mapping Based on Multiple Spatial Data Sources: A Bayesian Data Fusion Approach, Proc. IJCAI 2011: pp2411-2417, 2011

183. Mapping the Underworld: A Step-Change in the Approach to Utility Location and Designation, Royal, A.C.D., Rogers, C.D.F., Atkins, P.R., Chapman, D.N., Chen, H., Cohn, A.G., Foo, K.Y., Goddard, K., Hayes, R., Hao, T., Lewin, P.L., Metje, N., Muggleton, J.M., Naji, A., Orlando, G. and Pennock, S.R., Redfern, M.A., Saul, A.J., Swingler, S.G. and Wang, P., ICPTT 2011: Sustainable Solutions for Water, Sewer, Gas, and Oil Pipelines Proceedings of the International Conference on Pipelines and Trenchless Technology 2011, doi:http://dx.doi.org/10.1061/41202(423)168

184. Royal, A.C.D., Rogers, C.D.F., Atkins, P.R., Brennan, M.J., Chapman, D.N., Cohn, A.G., Curioni, G., Foo, K., Goddard, K.F., Lewin, P.L., Metje, N., Muggleton, J.M., Naji, A., Pennock, S.R., Redfern, M.A., Saul, A.J., Swingler, S.G. and Wang, P. (2010). Mapping the Underworld: Location Phase II - Latest Developments. International No-Dig 2010; 28th International Conference and Exhibition, 8-10 November, Singapore. CD-ROM.

185. Temporal Structure Models for Event Recognition, John Greenall, David C Hogg and Anthony G Cohn, Proceedings of the British Machine Vision Conference, 62.1–62.11, BMVA Press, Eds: Hoey, Jesse and McKenna, Stephen and Trucco, Emanuele, 2011

186. Interleaved Inductive-Abductive Reasoning for Learning Event-Based Activity Models, Krishna Dubba, Mehul Bhatt, Frank Dylla, Anthony G Cohn and David C Hogg, in Post Conference Proceedings of the Inductive Logic Programming Conference 2011, LNCS vol 7207, Springer

187. Workflow Activity Monitoring using the Dynamics of Pair-wise Qualitative Spatial Relations, A. Behera, A. G. Cohn and D. C. Hogg , 18th International Conference on MultiMedia Modeling (MMM 2012) Klagenfurt, Austria, January 4-6, 2012.

188. Interactive Semantic Feedback for Intuitive Ontology Authoring, Ronald Denaux, Dhavalkumar Thakker, Vania Dimitrova and Anthony G Cohn, in FOIS-12, Graz, Austria, July 2012.

189. Driving with Smith: A Scenario-Aware Driver Model for Driving Simulation, Z Xiong, O Carsten, A G Cohn, H Jamson, Poster paper at 21st Annual Conf on Behavior Representation in Modeling Simulation, March 2012

190. Zhitao Xiong, Anthony G. Cohn, Oliver Carsten and Hamish Jamson, "Autonomous Local Manoeuvre and Scenario Orchestration Based on Automated Action Planning in Driving Simulation", in Proceedings of Driving Simulation Conference Europe 2012, pages 233-244, Arts et Metiers ParisTech Paris, France, September 2012.

191. Ardhendu Behera, David C. Hogg, Anthony G. Cohn: Egocentric Activity Monitoring and Recovery. ACCV (3) 2012: 519-532

192. Anthony G. Cohn, Jochen Renz and Muralikrishna Sridhar. Thinking inside the box: A comprehensive spatial representation for video analysis, Proceedings of 13th International Conference on Principles of Knowledge Representation and Reasoning, Rome, June 2012

193. Guohua Liang, Anthony G. Cohn: An Effective Approach for Imbalanced Classification: Unevenly Balanced Bagging. AAAI 2013

194. Sebastian Rockel, Bernd Neumann, Jianwei Zhang, Sandeep Krishna Reddy Dubba, Anthony G. Cohn, Stefan Konecny, Masoumeh Mansouri, Federico Pecora, Alessandro Saffiotti, Martin Guenther, Sebastian Stock, Joachim Hertzberg, Ana Maria Tomé, Armando J. Pinho, Luis Seabra Lopes, Stephanie von Riegen, Lothar Hotz: An Ontology-based Multi-level Robot Architecture for Learning from Experiences. AAAI Spring Symposium: Designing Intelligent Robots 2013

195. Aryana Tavanai, Muralikrishna Sridhar, Feng Gu, Anthony G. Cohn, David C. Hogg: Carried Object Detection and Tracking Using Geometric Shape Models and Spatio-temporal Consistency. ICVS 2013: 223-233

196. David Stott, Doreen S. Boyd, Anthony Beck, Anthony Cohn: Hyperspectral detection dynamics of archaeological vegetation marks and enhancement using full waveform LiDAR data. IGARSS 2013: 2829-2831

197. Grounding Language in Perception for Scene Conceptualization in Autonomous Robots, Krishna Dubba, Miguel de Oliveira, Gi Lim, Luis Lopes, Anthony Cohn, David Hogg, AAAI 2014 Spring Symposium on Qualitative Representations for Robots March 24-26, 2014 at Stanford University in Palo Alto, California

198. A. Behera, M. Chapman, D. C. Hogg and A. G. Cohn, Egocentric Activity Recognition using Histograms of Oriented Pairwise Relations. The 9th International Conference on Computer Vision Theory and Applications (VISAPP), Lisbon, Portugal, 5-8 January 2014

199. Ronald Denaux, Vania Dimitrova and Anthony Cohn, in Do-Form, the AISB 2013 symposium on Enabling Domain Experts to use Formalised Reasoning Interacting with Ontologies and Linked Data through Controlled Natural Languages and Dialogues.

200. Context Aware Detection and Tracking, Aryana Tavanai, Muralikrishna Sridhar, Feng Gu, Anthony G Cohn, David Hogg, pp 2197-2202, ICPR-14

201. RCC*-9 and CBM*, Eliseo Clementini and Anthony G Cohn, pp 349-365, Proc. 8th Int. Conf. on Geographic Information Science (GIScience-14), Springer, LNCS 8728, 2014.

202. Development of Tunnel Diagnosis and Maintenance Ontology Suite, D Thakker, J Valdez Tellez, V Dimitrova, and A G Cohn, in Proc. 2nd Eastern European Tunnelling Conference (EETC2014), Athens, September 28 - October 1 2014.

203. PADTUN-Using Semantic Technologies in Tunnel Diagnosis and Maintenance Domain, D Thakker, V Dimitrova, AG Cohn, J Valdes: The Semantic Web. Latest Advances and New Domains, 683-698, Vol. 9088 , Springer doi:10.1007/978-3-319-18818-8_42, (**best in use paper award**)

204. Model Metric Co-learning for Time Series Classification, Huanhuan Chen, Fengzhen Tang, Peter Tino, Anthony Cohn, Xin Yao, in Proc. IJCAI-15, Bueno Aires, July 2015.

205. Tavanai, A., Sridhar, M., Chinellato, E., Cohn, A. G., and Hogg, D. C. (2015). Joint Tracking and Event Analysis for Carried Object Detection. In X. Xie, M. W. Jones, and G. K. L. Tam (Eds.), Proceedings of the 26th British Machine Vision Conference (BMVC 2015) (pp. 79.1-79.11). Swansea, UK: BMVA Press. doi:10.5244/C.29.79

206. Alomari, M., Chinellato, E., Gatsoulis, Y., Hogg, D. C., and Cohn, A. G. (2016). Unsupervised Grounding of Textual Descriptions of Object Features and Actions

in Video. In Proceedings, 15th International Conference on Principles of Knowledge Representation and Reasoning (pp. 505-508). Cape Town, South Africa: Association for the Advancement of Artificial Intelligence.

207. Duckworth, P., Gatsoulis, Y., Jovan, F., Hawes, N., Hogg, D. C., and Cohn, A. G. (2016). Unsupervised Learning of Qualitative Motion Behaviours by a Mobile Robot. In J. Thangarajah, K. Tuyls, C. Jonker, & S. Marsella (Eds.), Proceedings of the 15th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2016) (pp. 1043-1051). Singapore: International Foundation for Autonomous Agents and Multiagent Systems.

208. Bennett, B., Du, H., Gomez Alvarez, L., and Cohn, A. G. (2016). Defining Relations: a general incremental approach with spatial temporal case studies. In R. Ferrario, and W. Kuhn (Eds.), Frontiers in Artificial Intelligence and Applications Vol. 263 (pp. 23-36). Annecy, France: IOS Press. doi:10.3233/978-1-61499-660-6-23

209. Gatsoulis, I., Mehmood, M. O., Dimitrova, V. G., Magee, D. R., Sage-Vallier, B., Thiaudiere, P., . . . Cohn, A. G. (2016). Learning the Repair Urgency for a Decision Support System for Tunnel Maintenance. In G. A. Kaminka, M. Fox, P. Bouquet, E. Helermeier, V. Dignum, F. Dignum, and F. Van Harmelen (Eds.), Proceedings (pp. 1769-1774). The Hague, Netherlands: IOS Press. doi:10.3233/978-1-61499-672-9-1769

210. Duckworth, P., Alomari, M., Gatsoulis, Y., Hogg, D. C., and Cohn, A. G. (2016). Unsupervised Activity Recognition using Latent Semantic Analysis on a Mobile Robot. In G. A. Kaminka, M. Fox, P. Bouquet, E. Helermeier, V. Dignum, F. Dignum, and F. Van Harmelen (Eds.), Proceedings (pp. 1062-1070). The Hague, Netherlands: IOS Press. doi:10.3233/978-1-61499-672-9-1062 (**Runner up for best Student Paper Award**)

211. Peel, H., Morgan, G., Peel, C., Cohn, A., and Fuentes, R. (2016). Inspection Robot with Low Cost Perception Sensing. In 2016 Proceedings of the 33rd ISARC. Auburn, Alabama, USA: IAARC.

212. Du, H., Dimitrova, V., Magee, D., Stirling, R., Curioni, G., Reeves, H., Clark,B., Cohn, A. (2016). An Ontology of Soil Properties and Processes. In Lecture Notes in Computer Science Vol. 9982 (pp. 30-37). Kobe, Japan: Springer Verlag (Germany): Series. doi:10.1007/978-3-319-46547-0_4 (**Nominated for best Resources Track Paper Award**)

213. Chinellato, E., Hogg, D. C., & Cohn, A. G. (2016). Feature space analysis for human activity recognition in smart environments. In 12th International Conference on Intelligent Environments (IE 2016) (pp. 194-197). London, UK: IEEE. doi:10.1109/IE.2016.43

214. Alomari, M., Duckworth, P., Gatsoulis, Y., Hogg, D. C., & Cohn, A. G. (2017). A qualitative approach for online activity recognition. In Advances in Cooperative Robotics (pp. 747-754). London, UK: World Scientific. doi:10.1142/9789813149137_0086

215. Duckworth, P., Al-Omari, M., Charles, J., Hogg, D. C., & Cohn, A. G. (2017). Latent Dirichlet Allocation for Unsupervised Activity Analysis on an Autonomous Mobile Robot. In Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence (AAAI-17) (pp. 3819-3826). San Francisco, USA: AAAI Press.

216. Al-Omari, M., Duckworth, P., Hogg, D. C.,& Cohn, A. G. (2017). Natural Language Acquisition and Grounding for Embodied Robotic Systems. In Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence (pp. 4349-4356). San Francisco, CA, USA: AAAI Press.

217. Alomari, M., Duckworth, P., Hogg, D. C., & Cohn, A. G. (2017). Learning of Object Properties, Spatial Relations, and Actions for Embodied Agents from Language and Vision. In AAAI Spring Symposium: Symposium on Interactive Multi-Sensory Object Perception for Embodied Agents,. Stanford University, CA: AAAI Press.

218. Alomari, M., Duckworth, P., Hawasly, M., Hogg, D. C., & Cohn, A. G. (2017). Natural Language Grounding and Grammar Induction for Robotic Manipulation Commands. In Proceedings of the First Workshop on Language Grounding for Robotics (pp. 35-43). Vancouver, BC: The Association for Computational Linguistics. Retrieved from http://aclweb.org/anthology/W/W17/W17-28.pdf (**Best Paper Award**)

219. Clarke, B. G., Magee, D., Dimitrova, V., Cohn, A., Du, H., Mahesar, Q., Sadeghioon,, A M, Rogers, CDF, Gunn, D, Enwisle, D, Reeves, H, Collins, R, Stirling, R, Glendinning, S. (2017). A decision support system to proactively manage subsurface utilities. Proc. International Symposium for Next Generation Infrastructure Institution of Civil Engineers, London, 2017.

220. An Incremental von Mises Mixture Framework for Modelling Human Activity Streaming Data, Eris Chinellato, Kanti V. Mardia, David C. Hogg, and Anthony G. Cohn, Proc. ITISE-17, 2017

221. Uncertainty Management for Rule-based Decision Support Systems Quratul-ain Mahesar, Vania G Dimitrova, Derek R Magee, Anthony G Cohn, in ICTAI-17, 2017.

222. A C. elegans inspired robotic model for pothole detection, J Lones, AG Cohn, N Cohen, Proceedings of NIPS 2017 Worksop on Worm's Neural Information Processing, 1-4, 2017

223. Alomari, Muhannad; Duckworth, Paul; Bore, Nils; Hawasly, Majd; Hogg, David C; Cohn, Anthony G; Grounding of human environments and activities for autonomous robots IJCAI-17 Proceedings 1395-1402 2017 Lawrence Erlbaum Associates, Inc.

224. Peel, Harriet; Luo, S; Cohn, Anthony; Fuentes, Raul; An improved robot for bridge inspection, Proceedings of the 34th ISARC 663-670 2017

225. Mahesar, Quratul-ain; Dimitrova, Vania; Magee, Derek; Cohn, Anthony; Uncertainty management for rule-based decision support systems 2017 IEEE 29th International Conference on Tools with Artificial Intelligence (ICTAI) 884-891 2017 IEEE

226. Wei, Lijun; Clarke, Barry; Magee, Derek R; Dimitrova, Vania; Cohn, Anthony G; An integrated web-based decision support system for inter-asset streetworks management 26th GIScience research UK conference (GISRUK) 2018 Leeds

227. Tayyub, Jawad; Hawasly, Majd; Hogg, David C; Cohn, Anthony G; Learning hierarchical models of complex daily activities from annotated videos 2018 IEEE Winter Conference on Applications of Computer Vision (WACV) 1633-1641 2018 IEEE

228. Wei, Lijun; Du, Heshan; Mahesar, Quratul-ain; Clarke, Barry; Magee, Derek R; Dimitrova, Vania; Gunn, David; Entwisle, David; Reeves, Helen; Cohn, Anthony G; ATU-DSS: knowledge-driven data integration and reasoning for sustainable subsurface inter-asset management, European Semantic Web Conference, 2018 Springer

229. Wei, Lijun; Magee, Derek R; Dimitrova, Vania; Clarke, Barry; Du, Heshan; Mahesar, Quratul-ain; Al Ammari, Kareem; Cohn, Anthony G; Automated Reasoning for City Infrastructure Maintenance Decision Support. IJCAI, 5877-5879 2018

230. Richard-Bollans, AL; Gomez Alvarez, L; Cohn, Anthony G; The role of pragmatics in solving the Winograd Schema Challenge Proceedings of the Thirteenth International Symposium on Commonsense Reasoning (Commonsense 2017) 2018 CEUR Workshop Proceedings

231. Luo, Shan; Yuan, Wenzhen; Adelson, Edward; Cohn, Anthony G; Fuentes, Raul; Vitac: Feature sharing between vision and tactile sensing for cloth texture recognition 2018 IEEE International Conference on Robotics and Automation (ICRA) 2722-2727 2018 IEEE

232. Automated Reasoning for City Infrastructure Maintenance Decision Support, Lijun Wei, Derek R Magee, Vania Dimitrova, Barry Clarke, Heshan Du, Quratul-ain Mahesar, Kareem Al Ammari, Anthony G Cohn IJCAI, 5877-5879, 2018.

233. Investigating the Dimensions of Spatial Language, A Richard-Bollans, L Gómez Álvarez, B Bennett, AG Cohn, Speaking of Location 2019: Communicating about Space – Workshop at COSIT 2019

234. A logic of directions, H Du, N Alechina, AG Cohn, Proc. IJCAI-PRICAI, 1695-1702, 2020

235. Adaptive Human-Aware Task Planning, M Leonetti, L Iocchi, AG Cohn, D Nardi, ICAPS Workshop on Planning and Robotics (PlanRob), 2019

236. Hyperspectral imaging for autonomous inspection of road pavement defects, M Abdellatif, H Peel, AG Cohn, R Fuentes, Proceedings of the 36th International Symposium on Automation and Robotics, 2019.

237. Richard-Bollans, Adam; Gómez Álvarez, L; Bennett, Brandon; Cohn, Anthony G; Investigating the Dimensions of Spatial Language, Speaking of Location 2019: Communicating about Space – Workshop at COSIT 2019, 2019, Regensburg

238. Toumpa A; Cohn A, Relational Graph Representation Learning for Predicting Object Affordances NeurIPS 2019: 33rd Conference on Neural Information Processing Systems. Vancouver, Canada

239. Automatic generation of typicality measures for spatial language in grounded settings, A Richard-Bollans, B Bennett, A Cohn, European Conference on Artificial Intelligence, 2020

240. Alexia Toumpa and Anthony Cohn, Depth-informed Qualitative Spatial Representations for Object Affordance Prediction, QR-20.

241. Modelling the polysemy of spatial prepositions in referring expressions, A Richard-Bollans, LG Álvarez, AG Cohn, Proceedings of the International Conference on Principles of Knowledge Representation and Reasoning, 2020

242. Human-like planning for reaching in cluttered environments, Mohamed Hasan, Matthew Warburton, Wisdom C Agboh, Mehmet R Dogar, Matteo Leonetti, He Wang, Faisal Mushtaq, Mark Mon-Williams, Anthony G Cohn, 2020 IEEE International Conference on Robotics and Automation (ICRA), 7784-7790

243. Brown, Paul S; Cohn, Anthony G; Hart, Glen; Dimitrova, Vania; Contingent Scaffolding for System Safety Analysis, International Conference on Artificial Intelligence in Education, 395-399, 2020, Springer.

244. Categorisation, Typicality and Object-Specific Features in Spatial Referring Expressions, A Richard-Bollans, A Cohn, LG Álvarez, Proceedings of the Third International Workshop on Spatial Language, 2020

245. Gong, X, Yuan, R, Qian, H, Chen, Y, Cohn, A G, (2021) Emotion Regulation Music Recommendation Based on Feature Selection. In: New Trends in Intelligent Software Methodologies, Tools and Techniques. The 20th International Conference on Intelligent Software Methodologies, Tools, and Techniques (SoMeT 2021), 21-23 Sep 2021, Cancun, Mexico/Virtual. IOS Press , pp. 486-495. ISBN 978-1-64368-194-8

246. Pan, Zhiyi, et al. Scribble-Supervised Semantic Segmentation by Uncertainty Reduction on Neural Representation and Self-Supervision on Neural Eigenspace, Proceedings of the IEEE/CVF International Conference on Computer Vision. 2021.

247. Logan Dunbar, Benjamin Rosman, Anthony G Cohn, Matteo Leonetti, Reducing the Planning Horizon Through Reinforcement Learning, Joint European Conference on Machine Learning and Knowledge Discovery in Databases, 68-83, 2022

248. Using Graph Representation Learning with Schema Encoders to Measure the Severity of Depressive Symptoms, Simin Hong, Anthony G Cohn, and David C Hogg, International Conference on Learning Representations, 2022

249. Hua Hua, Dongxu Li, Ruiqi Li, Peng Zhang, Jochen Renz, ands Anthony G Cohn , Towards Explainable Action Recognition by Salient Qualitative Spatial Object Relation Chains, AAAI-22, 2022

250. Cohn, Anthony G., José Hernández-Orallo, Julius Sechang Mboli, Yael Moros-Daval, Zhiliang Xiang, and Lexin Zhou. A Framework for Categorising AI Evaluation Instruments, Proceedings of the Workshop on AI Evaluation Beyond Metrics workshop (EBeM) at IJCAI-22 (2022)

251. M Zhao, L Pang, Y Lu, F Xie, Z He, X Gong, AG Cohn, Conditional Domain Adaptation Based on Initial Distribution Discrepancy for EEG Emotion Recognition, Workshop on Clinical Image-Based Procedures, 72-81, 2022

252. F Li, DC Hogg, AG Cohn, Exploring the GLIDE model for Human Action-effect Prediction, P-VLAM (2022): 1.

253. F Li, AC UK, DC Hogg, AG Cohn, Ontology Knowledge-enhanced In-Context Learning for Action-Effect Prediction, Advances in Cognitive Systems, 2023

254. Harshita Garg, Sreejith V. Nanukuttan, Anthony G. Cohn and P.A. Muhammed Basheer, Predicting the performance of the repaired bridge soffit in Northern Ireland from real-time SHM data, BEI-23, 2023

255. Zhenghao He, Ruifan Chen, Yayue Hou, Fei Xie, Xiaoliang Gong, Anthony G. Cohn, A Music Labeling Model Based on Traditional Chinese Music Characteristics for Emotional Regulation, ICSCA 2023: Proceedings of the 2023 12th International Conference on Software and Computer Applications

256. Toumpa, A and Cohn, A Future Qualitative Activity Graph Prediction. In: 37th AAAI Conference on Artificial Intelligence, Workshop on Graphs and more Complex Structures for Learning and Reasoning, 07-14 Feb 2023, Washington DC, USA.

257. Understanding the Spatial Complexity in Landscape Narratives Through Qualitative Representation of Space (Short Paper), E Haris, AG Cohn, JG Stell, 12th International Conference on Geographic Information Science (GIScience 2023), In Leibniz International Proceedings in Informatics (Vol. 277). Schloss Dagstuhl-Leibniz-Zentrum.

258. Chengke Sun, Anthony Cohn, Matteo Leonetti, Online Human Capability Estimation through Reinforcement Learning and Interaction, Proc. of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023

259. Ezeani, I., Rayson, P., Gregory, I., Haris, E., Cohn, A., Stell, J., Cole, T., Taylor, J., Bodenhamer, D., Devadasan, N. and Steiner, E., 2023. Towards an Extensible Framework for Understanding Spatial Narratives. Editors: Ludovic Moncla, LIRIS UMR CNRS 5205, INSA Lyon, France Bruno Martins, University of Lisbon, Portugal Katherine McDonough, Lancaster University Xuke Hu, German Aerospace Center.

260. Sun, C., Cohn, A.G. and Leonetti, M., 2023, October. Online Human Capability Estimation through Reinforcement Learning and Interaction. In 2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) (pp. 7984-7991). IEEE.

261. Lei Fu, Dongming Zhang, Hongwei Huang, Anthony Cohn, Zhongqiang Liu , "Muck identification and anomaly detection in earth pressure balance shield based on multitask deep learning", XVIII European Conference on Soil Mechanics and Geotechnical Engineering, 2024

262. Li, F., Hogg, D.C. and Cohn, A.G., 2024, March. Advancing Spatial Reasoning in Large Language Models: An In-Depth Evaluation and Enhancement Using the StepGame Benchmark. In Proceedings of the AAAI Conference on Artificial Intelligence (Vol. 38, No. 17, pp. 18500-18507).

Invited Parts of Books:

263. A G Cohn, Classical Logic: an introduction, in *Non Standard Logics for Automated Reasoning*, ed P Smets et al, Academic Press, London, pp 8 - 15, 1988.

264. A G Cohn, Qualitative Reasoning, in *Advanced Topics in Artificial Intelligence*, ed R Nossum, Springer Verlag, Berlin, pp 60-94, 1988

265. A G Cohn, D A Randell, Z Cui and B Bennett, Qualitative Spatial Reasoning and Representation, in Qualitative Reasoning and Decision Technologies, ed. N Piera Carreté and M G Singh, CXIMNE, Barcelona, pp 513-522, 1993.

266. A G Cohn, J Gooday and B Bennett, A comparison of structures in spatial and temporal logics, in *Philosophy and the Physical Sciences*, eds, B Smith & R Casati, Hoelder-Pichler-Tempsky, Vienna, pp 409-422, 1994.

267. A G Cohn, Calculi for qualitative spatial reasoning in: Calmet, J, Campbell, J A & Pfalzgraf, J (editors) Artificial Intelligence and Symbolic Mathematical Computation, pp. 124-143 Springer-Verlag. 1996. (Invited Paper)

268. A G Cohn, Qualitative spatial representation and reasoning techniques in: Brewka, G, Habel, Ch & Nebel, N (editors) Proceedings of KI-97, pp. 1-30 Springer-Verlag. 1997. (Invited Paper)

269. A G Cohn, Reasoning about qualitative representations of space and time in: Baader, F (editors) Automated Deduction - CADE-19, pp. 334 Springer-Verlag Springer-Verlag. 2003. (Invited Abstract)

270. Jennings, N R; Cohn, A G; Fox, M; Long, D; Luck, M; Michaelides, D T; Munroe, S; Weal, M J. Interaction, planning and motivation in: Morris, R, Tasserenko, L & Kenward, M (editors) Cognitive systems: Information processing meets brain science, pp. 163-188 Academic Press. 2005.

271. Cohn, A G; Renz, J. Qualitative spatial reasoning in: van Harmelen, F, Lifschitz, V & Porter, B (editors) Handbook of Knowledge Representation Elsevier Science. 2007.

272. Anthony G. Cohn: Mining Video Data: Learning about Activities, page 1, Proc. KSEM 2010, Eds: Yaxin Bi and Mary-Anne Williams, Springer, Lecture Notes in Computer Science, vol. 6291, 2010

273. Bennett, Brandon, and Anthony G Cohn. Automated common-sense spatial reasoning: still a huge challenge, in Human-Like Machine Intelligence (2021): 405-429, eds: S Muggleton and N Cater, Oxford University Press.

Refereed Parts of Books:

274. A G Cohn, Expert and Knowledge Based Systems, Digital Systems Reference Book, B Holdsworth & G R Martin (eds), Butterworth Scientific, Guilford, pp 5.15.1 - 5.15.38, 1991.

275. D A Randell, A G Cohn & Z Cui, Naive Topology: modelling the force pump, Advances in Qualitative Physics, ed P Struss & B Faltings, pp 177 - 192, MIT Press, 1992

276. A G Cohn, On the Appearance of Sortal Literals: a Non Substitutional Approach to Hybrid Reasoning, in *Many Sorted Logic and its Applications*, J V Tucker & K Meinke (eds), John Wiley, pp 149-177, 1993

277. A G Cohn, Order Sorted Logic, Encyclopaedia of Artificial Intelligence (second edition), Ed S Shapiro, Wiley Interscience, New York, pp 864-866, 1992

278. D A Randell & A G Cohn, Exploiting Lattices in a Theory of Space and Time, in "Semantic Networks", ed: F Lehmann, Pergamon Press, Oxford, pp 459 - 476, 1992 (Note: this is a republication of [12] in book form).

279. A G Cohn, Completing Sort Hierarchies, in "Semantic Networks", ed: F Lehmann, Pergamon Press, Oxford, 477 - 491, 1992 (Note: this is a republication of [13] in book form).

280. A G Cohn, N M Gotts, Z Cui, D A Randell, B Bennett, J M Gooday, Exploiting temporal continuity in temporal calculi in: Golledge, R G & Egenhofer, M J (editors) Spatial and Temporal Reasoning in Geographical Information Systems, pp. 5-24 Oxford University Press. 1998.

281. A G Cohn, D Magee, A Galata, D C Hogg, S M Hazarika, Towards an architecture for cognitive vision using qualitative spatio-temporal representations and abduction in: Freksa, C, Brauer, W, Habel, C & Wender, K F (editors) Spatial Cognition III, Routes and Navigation, Human Memory and Learning, Spatial Representation and Spatial Learning, pp. 232-248 Springer-Verlag. 2003.

    A G Cohn, Z Cui, D Randell, N Gotts and J Gooday, Exploiting Temporal Continuity in Qualitative Spatial Calculi, in *Spatial and Temporal Reasoning in Geographic Information Systems*, ed R Golledge and M Egenhofer, Elsevier, 1995.

282. A G Cohn and N M Gotts, The 'Egg-Yolk' Representation Of Regions with Indeterminate Boundaries, in "Geographic Objects with Uncertain Boundaries" P Burrough & A Frank (eds), Taylor and Francis, in press (this paper is essentially a longer version of 107).

283. A G Cohn, J M Gooday, B Bennett and N M Gotts, A logical approach to representing and reasoning about space, *in* Integration of Natural Language and Vision Processing (Vol. III): theory and grounding representations, ed. P MckEvitt, Kluwer, (republication of [14] 5 pp, 1995.

284. J M Gooday and A G Cohn, Using spatial logic to describe visual languages, *in* Integration of Natural Language and Vision Processing (Vol. IV): recent advances, ed P McKevitt, Kluwer, (republication of [17]), 1997.

285. Yuri Dabaghian, Anthony G. Cohn and Loren Frank, Topological Coding in the Hippocampus, Computational Modeling and Simulation of Intellect: Current State and Future Perspectives. IGI Global, 2011. 293-320. Web. 17 Mar. 2012. doi:10.4018/978-1-60960-551-3.ch012

286. H Chen, A G Cohn and X Yao, Ensemble Learning by Negative Correlation Learning, in Ensemble Machine Learning, C Zhang and Y Ma (Eds), Springer, pp 177-201, dx.doi.org/10.1007/978-1-4419-9326-7_6, 2012

287. A Qualitative Trajectory Calculus to Reason about Moving Point Objects, Matthias Delafontaine, Seyed Hossein Chavoshi, Anthony G. Cohn, Nico Van de Weghe,Chapter 4, in Qualitative Spatio-temporal Representation and Reasoning: Trends and Future Directions, Ed: S M Hazarika, pp 147-167,IGI Global, 2012

288. A Region-Based Ontology of the Brain Ventricular System and Its Relation to Schizophrenia, Paulo Santos, Rodolpho Freire, Danilo N. dos Santos, Carlos Thomaz, Paulo Sallet, Mario Louza, Anthony G Cohn, Chapter 7 in Qualitative Spatio-temporal Representation and Reasoning: Trends and Future Directions, Ed: S M Hazarika, pp 256-273, IGI Global, 2012

289. Jiayao Chen, Dingli Zhang, Qian Fang, Hongwei Huang, Anthony G. Cohn, Chapter 20 - Application of machine vision in two-dimensional feature characterization of rock engineering, Editor(s): Hoang Nguyen, Xuan-Nam Bui, Erkan Topal, Jian Zhou, Yosoon Choi, Wengang Zhang, Applications of Artificial Intelligence in Mining and Geotechnical Engineering, Elsevier, 2024, Pages 361-378, ISBN 9780443187643.

Invited Unpublished Conference and Workshop Articles

290. A G Cohn, The State of the Art in Artificial Intelligence, *Proc HP Users Joint Conference*, Warwick, 1985

291. P J Hayes & A G Cohn, Qualitative Reasoning, Lecture notes for tutorial lecture at European Conference on AI, Brighton, 1986

292. A G Cohn, A Spatial Logic based on Regions and Connection, Presented at TSM'95, Semantics of Time, Space and Movement, Sept 1993, pp 419-434, Chateau de Bonas - Gascony, France (a shortened form of 104).

293. A G Cohn and N M Gotts, Expressing Spatial Vagueness In Terms Of Connection, invited paper, Proc Workshop on Topological Foundations of Cognitive Science, Buffalo, USA, in Carola Eschenbach, Christopher Habel , Barry Smith (eds.): Topological Foundations of Cognitive Science, Papers from the Workshop "Topological Foundations of Cognitive Science" at the First International Summer Institute in Cognitive Science, Buffalo, July 9-10, 1994, Reports of the Doctoral Program in Cognitive Science, University of Hamburg, Report 37, pp 131 - 150, October 1994.

294. A G Cohn, Qualitative Shape Representation using Connection and Convex Hulls, Presented at TSM'95, TIME, SPACE and MOVEMENT: Meaning and Knowledge in the Sensible World, June 1995, pp C:3-16, Chateau de Bonas - Gascony, France.

295. Interaction, Planning and Motivation, A G Cohn and N R Jennings, Editors, Area Review for DTI FORESIGHT Cognitive Systems Initiative, Interaction Conference, HP Labs Bristol, September 2003.

296. A G Cohn, Qualitative spatial representations in: IJCAI-99 Workshop on Adaptive Spatial Representations of Dynamic Environments. 1999.

Refereed Unpublished Conference and Workshop Articles

297. A G Cohn, A More Expressive Many Sorted Logic, invited paper, *Alvey Inference Workshop*, Imperial College, IEE, September 1984

298. A G Cohn, Knowledge Representation for Causal Reasoning: A Position Paper, *Alvey workshop on "Deep Knowledge"*, University of Sussex, IEE, July 1985

299. A G Cohn, Taxonomic Reasoning Techniques, *presented at Future of Expert Systems Workshop*, Melville Castle, Edinburgh, June 1986

300. A G Cohn & F Hovsepian, Quality Spaces and Tolerance Spaces: reasoning about indistinguishibility and varying grain sizes, *Proc DKBS5*, R Leitch (ed) IEE, 1988.

301. A G Cohn & W M Beynon, Representing Design Knowledge in a Definitive Programming Framework, *Proc 2nd IFIP WG 5.2 Workshop on Intelligent CAD*, Sept 1988, pp 39- 53, Cambridge. AI Workshop on Principles of Hybrid Reasoning, St Paul/Minnesota, pp 63-78, 1988.

302. A G Cohn, Improving the Efficiency of Inference through Many Sorted Logic, *AAAI Spring Symposium on Representation and Compilation in High Performance Theorem Proving*, Stanford, 1989.

303. D A Randell & A G Cohn, Exploring naive topology: modelling the force pump, 3rd International Workshop on Workshop on Qualitative Physics, Stanford, August 1989.

304. D A Randell & A G Cohn, Representing Topological and Metrical Properties in Physical Processes, *Proc DKBS6*, A Spector (ed), 1989.

305. A M Frisch & A G Cohn, A Universal Algorithm for Sorted Unification, UNIF-90, Leeds, 1990.

306. G Lajos & A G Cohn, Software Translation and Natural Language Generation on the KCM, Proc. First Intl. KCM User Group Meeting, ECRC, Munich, 1991.

307. I P Gent & A G Cohn, Reasoning about hybrid reasoning: a discussion, Proc AAAI Fall Symposium on the Principles of Hybrid Reasoning, Asilomar, pp 7 - 12, 1991.

308. D A Randell, Z Cui and A G Cohn, Logical and Computational Aspects of Space and Time, Proc ECAI92 Workshop on "Spatial Concepts: Connecting Cognitive Theories with Formal Representations", Vienna, pp 3 pp, August 1992.

309. Z Cui, A G Cohn and D A Randell, Qualitative Simulation Based on a Logic of Space and Time, Proc QR92, Heriot Watt University, Edinburgh, pp 202 - 217, August 1992.

310. A G Cohn, Z Cui and D A Randell, Logics for Spatial Reasoning, Working Notes, AAAI Fall Symposium on Design from Physical Principles, Cambridge, Massachusetts, p138, 1993.

311. A G Cohn, Z Cui and D A Randell, A Taxonomy of Logically Defined Qualitative Spatial Relations, Proc International Workshop on Formal Ontology in Conceptual Analysis and Knowledge Representation, Padova, Ladseb-CNR Internal Report 01/93, ed N Guarino and R Poli, pp 149-158, 1993

312. A G Cohn, D A Randell and Z Cui, Exploiting Temporal Continuity in Qualitative Spatial Calculi, Specialist Meeting on Time in Geographic Space, Lake Arrowhead, California, 8 pp, May 1993.

313. A. G. Cohn, Modal and Non Modal Qualitative Spatial Logics, Workshop on Spatial and Temporal Reasoning at IJCAI: International Joint Conference of Artificial Intelligence, Chambery, pp 95 - 99, August, 1993.

314. A G Cohn, Reasoning about Space, Working Notes AISB94 Workshop on Automated Reasoning, Leeds, pp 11 - 12, 1994.

315. F Lehmann & A G Cohn, The Egg-Yolk Theory: A Partial Ordering on Pairs of Spatial Regions, AISB94 Workshop on Spatial Reasoning, Leeds, 16 pp, 1994.

316. A G Cohn & J Gooday, Defining the Syntax and the Semantics of a Visual Programming Language in a Spatial Logic, Proc AAAI-94 Workshop on Spatial and Temporal Reasoning.

317. J M Gooday and A G Cohn, Conceptual Neighbourhoods in Temporal and Spatial Reasoning, Workshop on Spatial and Temporal Reasoning at ECAI-94, Amsterdam, pp 57 - 64, August 1994.

318. A G Cohn and N M Gotts, A Mereological Approach to Representing Spatial Vagueness Working Papers, Ninth International Workshop on Qualitative Reasoning, pp.246-255, 1995

319. C G Ralha and A G Cohn, Building Maps of Hyperspace, in Proceedings of the WWW National Conference - Internet Multimedia Information (IMI'95), Braga, Portugal, 1995

320. J M Gooday, A G Cohn, Visual language syntax and semantics: a spatial logic approach in: Marriott, K & Meyer, B (editors) Proceedings of the International Workshop on Theory of Visual Languages. 1996.

321. J H Fernyhough, A G Cohn, D C Hogg, Event recognition using qualitative reasoning on automatically generated spatio-temporal models from visual input in: Proceedings of the IJCAI97 Workshop on Spatial and Temporal Reasoning. 1997.

322. J H Fernyhough, A G Cohn, D C Hogg, . Event recognition from visual input using qualitative reasoning on automatically generated spatio-temporal models in: IJCAI97 Poster Abstracts, pp. 35. 1997.

323. B Bennett, A Isli, A G Cohn, When does a Composition Table provide a complete and tractable proof procedure for a relational constraint language? in: Proceedings of the IJCAI97 Workshop on Spatial and Temporal Reasoning. 1997.

324. J H Fernyhough, A G Cohn, D C Hogg, Event recognition using qualitative reasoning on automatically generated spatio-temporal models from visual input in: Working Notes ICCV98 Workshop on Conceptual Description of Images (CDI-98). 1998.

325. S Wright, L T P Fernando, N Ward, A G Cohn, . Framework for supporting intelligent traffic within the Leeds Driving Simulator in: ECAI 98 Workshop on Intelligent Virtual Environments. 1998.

326. A G Cohn, S M Hazarika, A spatio-temporal theory of physical objects in: ECAI 2000 Workshop on Current Trends in Spatio-Temporal Reasoning. 2000.

327. S M Hazarika, A G Cohn, Qualitative self-localization using a spatio-temporal ontology: a preliminary report in: Proceedings of Workshop on Spatial and Temporal Reasoning with 'Agents' Focus at the 17th International Joint Conference on Artificial Intelligence. 2001.

328. A Galata, A G Cohn, D Magee, D C Hogg, Learning temporal and qualitative spatial components of an interaction model in: Proceedings ECCV Workshop on Vision and Modelling of Dynamic Scenes (VAMODS). 2002.

329. Santos, P; Magee, D; Cohn, A G. Looking for logic in vision in: Proceedings Eleventh Workshop on Automated Reasoning, pp. 61-62. 2004.

330. Magee D., Needham C.J., Santos P., Cohn A.G. and Hogg D.C., Autonomous learning for a cognitive agent using continuous models and inductive logic programming from audio-visual input, Proc. AAAI Workshop on Anchoring Symbols to Sensor Data, pp. 17-24. 2004.

331. Hogg, D; Cohn, A G; Devin, V; Magee, D; Needham, C; Santos, P. Learning about objects and activities in: Barber, s, Baxter, P D, Mardia, K V & Walls, R E (editors) Quantitative Biology, Shape Analysis and Wavelets - The 24th Leeds Annual Statistical Workshop, pp. 79-82 University of Leeds. 2005.

332. QSRlib: a software library for online acquisition of Qualitative Spatial Relations from Video Yiannis Gatsoulis, M Alomari, C. Burbridge, C. Dondrup, P. Duckworth, P. Lightbody, M. Hanheide, N. Hawes, D. C. Hogg and A. G. Cohn, 29th International Workshop on Qualitative Reasoning (QR-16), 2016.

333. Unsupervised Natural Language Acquisition and Grounding to Visual Representations for Robotic Systems , Muhannad Alomari, Paul Duckworth, Yiannis Gatsoulis, David Hogg, and Anthony Cohn, IJCAI Workshop on Cognitive Knowledge Acquisition and Applications (Cognitum-16).

334. Unsupervised Learning of Human Activities by a Mobile Service Robot, Paul Duckworth, Muhannad Alomari, Yiannis Gatsoulis, David C. Hogg and Anthony G. Cohn, IJCAI Workshop on Autonomous Service Robotics, 2016

335. Saisakul Chernbumroong, Heshan Du, Derek Magee, Vania Dimitrova and Anthony Cohn, Assessing the Underworld Ontology for Integrated Inter-asset Management, 6th UK Ontology Network Meeting (UKON-16).

336. Yiannis Gatsoulis, Owais Mehmood, Vania Dimitrova and Anthony G. Cohn (Leeds) Combining Ontologies and Machine Learning to Capture Tacit Knowledge in Complex Decision Making, 6th UK Ontology Network Meeting (UKON-16).

337. Cohn, A.G., 2023. An Evaluation of ChatGPT-4's Qualitative Spatial Reasoning Capabilities in RCC-8, in working notes of Qualitative Reasoning workshop at ECAI-22, 2023.

Other output:

338. A Research Roadmap of Cognitive Vision, Peter Auer, Aude Billard, Horst Bischof, Isabelle Bloch, Pia Boettcher, Heinrich Buelthoff, Hilary Buxton, Henrik Christensen, Tony Cohn, Patrick Courtney, Andrew Crookell, James Crowley, Sven Dickinson, Christof Eberst, Jan-Olof Eklundh, Bob Fisher, Wolfgang Foerstner, John Gilby, Goesta Granlund, Vaclav Hlavac, Josef Kittler, Walter Kropatsch, Ales Leonardis, Jim Little, Giorgio Metta, Hans-Hellmut Nagel, Bernhard Nebel, Bernd Neumann, Heinrich Niemann, Lucas Paletta, Axel Pinz, Fiora Pirri, Gerhard Sagerer, Giulio Sandini, Bernt Schiele, Rebecca Simpson, Gerald Sommer, John Tsotsos, Monique Thonnat, David Vernon, Markus Vincze, ECVISION, www.ecvision.org, v5.0, 2005.

339. Dagstuhl Seminar 10412, QSTRLib: A Benchmark Problem Repository for Qualitative Spatial and Temporal Reasoning Leibniz-Zentrum fuer Informatik, Schloss Dagstuhl, October 11-13, 2010 Eds: Anthony G. Cohn, Jochen Renz, Geoff Sutcliffe, Stefan Woefl

340. John Bateman and Anthony G Cohn and James Pustejovsky, 10131 Executive Summary and Abstracts Collection – Spatial Representation and Reasoning in Language: Ontologies and Logics of Space, in Spatial Representation and Reasoning in Language : Ontologies and Logics of Space, Eds: John A. Bateman, Anthony G. Cohn and James Pustejovsky, Dagstuhl Seminar Proceedings, ISSN 1862-4405, Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, Germany, 2011

341. Krishna Dubba, Paulo Santos, Anthony Cohn and David Hogg, Probabilistic relational learning of event models from video, presented at ILP-11, Windsor, UK

342. Muralikrishna Sridhar, Anthony G Cohn and David C Hogg, Relational Learning with Qualitative Spatio-Temporal Graphs for Understanding Video Activities, presented at ILP-11, Windsor, UK

343. On evaluating artificial intelligence systems: Competitions and benchmarks, A G Cohn, in AI and the Future of Skills, Volume 1 Capabilities and Assessments, OECD, 2022

344. Anthony G. Cohn and José Hernández-Orallo, A framework for characterising evaluation instruments of AI performance, AI and the Future of Skills, Volume 2 , OECD, 2023.

Public Data Sets:

345. Behera, A., Hogg, D., & Cohn, A. (2015). COGNITO: Activity monitoring and recovery. doi:10.5518/11

346. Alomari, M., Hogg, D. C., & Cohn, A. G. (2017). Leeds Robotic Commands. doi:10.5518/110

347. Du, Heshan and Cohn, Anthony (2016), An Ontology of Soil Properties and Processes, https://doi.org/10.5518/54

348. Du, Heshan and Clarke, Barry and Entwisle, David and Eskandari Torbaghan, Mehran and Collins, Richard and Stirling, Ross and Curioni, Giulio and Gunn, David and Reeves, Helen and Dimitrova, Vania and Cohn, Anthony (2017) Ontologies for describing Properties and Processes of City Infrastructure Assets: the Ground, Roads and Pipes. University of Leeds, https://doi.org/10.5518/190

349. P Duckworth, M Alomari, D C Hogg, A G Cohn, Mobile robot observing kitchen activities - University of Leeds, 2016 – updated 2017 with additional data, https://doi.org/10.5518/86

Videos:

350. Grounding of Human Environments and Activities for Autonomous Robots, M Alomari, P Duckworth, M Hawasly, D C Hogg, A G Cohn, IJCAI-17 (**Best Video Award**)

    `www.youtube.com/watch?v=rUWKyf6cVYA&index=2&list=PLv7SuAt_Vfa8vHX8g8_Ju9rzPhtLeurQQ`