Curriculum Vitae
20th August 2017

Anthony G Cohn, FREng, CEng, CITP, FAAAI, FECCAI, FAISB, FIET, FBCS

School of Computing
University of Leeds
Leeds LS2 9JT
England
Tel: (0113) 343 5482
Fax: (0113) 343 5468
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- *present*: Director of Research and Innovation, School of Computing

2012 - 2014: Honorary Adjunct Professor, University of Technology Sydney

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.

EPSRC £188095, 1.8.95 - 31.7.98, *Logical Theories and Decision Procedures for Reasoning about Physical Systems* Sole Investigator: A G Cohn

EPSRC £91,341, 1.1.96 - 31.12.98, *Detecting and Exploiting Determinacy in Logic Programs*, Principal Investigator: P M Hill, Co-Investigator: A G Cohn

EPSRC £47742, 1.1.1997 - 12.1997, *Declarative language interface for constraint solving*, Principal Investigator: P M Hill; Co-investigator: A G Cohn

EPSRC £167103, 1.10.98 - 9.2001, *Semantic-based software support for constraint logic programs*, Principal Investigator: P M Hill; Co-investigators: A G Cohn and B M Smith

EPSRC £237700, 01.01.1999 – 6.2002, *Managing vagueness, uncertainty and granularity in spatial information systems*, Principal Investigator: A G Cohn, Co-investigator: S A Roberts

EPSRC £206,505, 1.10.2000 – 9.2002, *Specification and Verification of ARM6*, Original Principal Investigator: G Birtwistle, Original Co-investigator: K M Hobley; New Principal Investigator: A G Cohn (from 1.1.03, after original investigators left academic sector).

CEC, £364,710, 1.3.2001 – 7.2004, *Cognitive vision systems*, Principal Investigators: A G Cohn and D C Hogg

Thames Water plc, £32150, 01.11.2000 - 9.2001 *A study into High Burst Occurrence* Investigators: A G Cohn, P M Mott, S A Roberts

EPSRC £25,745, 1.9.2001 – 8.2002, *Escape analysis of object-orientated languages*, Principal Investigator: P M Hill; Co-investigator A G Cohn

Ordnance Survey £19,673, 1.7.2002 - 10.2002, *Ontology of Built Environments*, Sole Investigator: A G Cohn; Co-author: B Bennett

Ordnance Survey £19,952 1.3.2004 – 10.2004, *Iridium - foundations for a hydrographic ontology*, Principal Investigator: B Bennett, Co-Investigator: A G Cohn

EPSRC £158,437, plus £9,000 from Yorkshire Water, and £4,000 from Ordnance Survey. 1.1.2005 – 31.12.2008, *Mapping the Underworld: Knowledge and Data Integration*, Principal Investigator: A G Cohn; Co-investigators: B Bennett and J G Stell.

DTI Technology Programme £629,793, 1/1/2006 - 31/12/2009, *Visualising integrated information on buried assets to reduce streetworks (VISTA)*, Principal Investigator: A G Cohn; Co-investigators: B Bennett, D J Duke and J G Stell.

EPSRC, £426,517, 1/3/2006-28/2/2009, *Learning about Activities from Video (LAViD)*, Principal Investigators: D C Hogg, 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); final distribution of monies still being determined.

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 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 hyperspectral flights to be flown in 2012.

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 Gramahm, 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 Sk?odowska-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

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 :

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

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

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

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

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).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Invited Speaker at KBCS-2004, Hyderabad, December 2004

Invited Speaker at CIT'04, Hyderabad, December 2004

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

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

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

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

Invited Speaker, European GeoInformatics Workshop, Edinburgh, March 2007

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Keynote Talk, 2nd World Conference on Innovation and Computer Sciences (INSODE),Efes, Turkey, May 2012

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

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

Invited talk at SL2MOD workshop at ISWC 2013, Sydney

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

Invited Panellist at IWCV-14, Italy, May 2014

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

Invited talk at Social Robotics 2014, Sydney

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

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

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

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

Invited talk at EPSRC sponsored Human level AI workshop (MI-20) Oct 16

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

Invited Speaker at Cognitum workshop at IJCAI 2017

Invited Panelist at at Cognitum workshop at IJCAI 2017

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

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

Invited Presentations at National Meetings:

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

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

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

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

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

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

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

Invited Speaker at AISB91 Conference, Leeds, April 1991.

Invited Panelist at AISB94 Workshop on Spatial Reasoning, Leeds 1994

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

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

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

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

Invited talk at the RAEng Research day, Leeds, October 2016

Invited Speaker at CPHC-17, Reading, April 2017

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

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; QMC, University of London Rochester University, USA; Shangxi Normal University; SCI, Bristol; SRI,

California; Strathclyde University; Sussex University; 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; 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:

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.

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 worlds 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.

Media Appearances

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 North, 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 on the 20th Anniversary of the Deep Blue chess beating Kasparov at Chess.

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

A K Courtney (MPhil 1989); G Kelleher (* PhD 1990, took over supervision on arrival at Leeds, Jan 90 – July 90) F Hovsepian (PhD 1992); D Randell (PhD 1991); C Johnson (MSc by dissertation awarded, 1989); G Saward (PhD 1991); G Lajos (* PhD 1992); I P Gent (PhD 1992); B Bennett (PhD 1998); A Adams (* MSc by Dissertation with Distinction awarded, 1994); G C Ralha (PhD 1996); J C L Ralha (PhD 1998); J Fernyhough (* PhD 1996); S Wright (* PhD 2000); S M Hazarika (PhD 2005); Z Al Qayyum (PhD 2008); M Sridhar (* PhD 2011); K Dubba (* PhD 2012); R Denaux (* PhD 2013); J Greenall (* PhD 2013); Z Xiong (* PhD 2014); A Tavanai (*PhD 2016); D Stott (* PhD 2017); P Pueblo Guillen (* PhD 2017).

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 (2015-2018); Q Mahesar (2015-1017), A Binch (20160-2017); M Hawasly (2016-2017), S Luo (2015-1017); A Shirazi (2016-2017); J Lones (2017-).

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.
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 –

Member of Advisory Board of KR Inc, 2002 – 2006

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 —

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 output 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 output for a UK Computing Department, October 2006.

Reviewer of research output 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 research output for a UK Computing Department, July 2017

Consultancies (past and present):

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 –

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

Verona/Griffith joint, August 2014

Tezpur, India 2015

Tezpur, India, 2016

Bremen, May, 2017

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

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 IJ-CAI'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

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.

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 [206]).

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 [207]).

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 Brandon, 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), doi:10.1017/S0269888913000350.

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.

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