Curriculum Vitae   *[updated 9/1/2017]*

Ian David Reid

Professor of Computer Science
School of Computer Science
University of Adelaide
North Terrace Campus
South Australia, 5005

Education
- D.Phil. Oxon, 1992, Recognizing parameterized objects from range data
- BSc (U. of Western Australia), 1987, 1st class Hons, GPA 4.0/4.0

Employment

<u>School of Computer Science, University of Adelaide</u>
- Professor of Computer Science, (Sept 12 – present)

<u>Dept of Engineering Science, University of Oxford</u>
- Professor of Engineering, (Oct 00 – Sept 12, Reader Oct 06 – Sept 10, Professor Oct 10 --)
- EPSRC Advanced Research Fellow (Oct 97 – Sep 00)
- Departmental Lecturer in Information Engineering in association with Exeter College (Oct 98 – Sep 99)
- Research Assistant, RA2 (Oct 96 – Sep 97)
- Glasstone Research Fellow in Science (Oct 93 – Sep 96)
- Research Assistant, RA1A (Nov 91 – Sep 93)

<u>Exeter College, University of Oxford</u>
- Tutorial Fellow, Oct 2000 – Sept 2012

<u>Oxford Brookes University</u>
- Visiting lecturer in Intelligent Systems, Vision Module (95 – 98)

Awards / Distinctions

- Fellow Academy of Technological Sciences and Engineering, 2016
- Best Paper Award (with Zongyuan Ge *et al*), DICTA, 2016
- ARC Australian Laureate Fellowship, 2013—2018
- Best Paper Award (with Michael Milford *et al*), IEEE Workshop on Vehicle Technology, 2015
- Best Paper Award (with Carl Ren, Victor Prisacariu and David Murray), 3DV 2014
- Best reviewer award, CVPR 2015
- Best reviewer award, RSS 2014
- Dennis Moore Oration, Australian Computer Society WA Branch, 2013
- Winner, Freescale Sense the World video competition (with V Prisacariu), 2010
- Best Industrial Paper (with Alonso Patron, Marcin Marsalek and Andrew Zisserman), British Machine Vision Conference 2010
- Best Student Poster (with Ben Benfold), British Machine Vision Conference 2009
- Best Paper Award (with Oliver Woodford, Phil Torr and Andrew Fitzgibbon), IEEE Computer Vision and Pattern Recognition 2008
- Paper "MonoSLAM: Real-time Single Camera SLAM" (with A Davison, O Stasse and N Molton) among top-cited of all Computer Science papers of 2007 *(source http://citeseerx.ist.psu.edu/stats/articles?y=2007)*
- Gledden Senior Visiting Fellowship, University of Western Australia, 2005
- Best Science Paper (with Philip Tresadern), British Machine Vision Conference, 2003

- EPSRC Advanced Research Fellowship, 1997
- Violette and Samuel Glasstone Fellowship, 1993
- Rhodes Scholarship (Western Australia), 1987/88
- ACS WA (top student) and IBM WA (best honours thesis) prizes in Computer Science, University of Western Australia, 1987

Professional Activities

- **Institutional review**
  International panel of experts, review of INRIA (Institute National de Recherche en Informatique et Automatique) robotics programme, 2009
  International review panel for NICTA Computer Vision, 2012

- **National grant review**
  Member, EPSRC College of experts (international)
  Reviewer, Australian Research Council
  Reviewer, Austrian Research Promotion Agency
  Reviewer, Christian Doppler Foundation, Austria

- **Advisory**
  Australian Academy of Sciences, National Committee for Information and Communications Sciences (committee member), 2014-present
  Academy of Science Expert Committee on Future Science for Autonomous Systems in Complex Environments, 2016

- **Keynote/Plenary (funded) lectures**:
  Tenth Indian Conference on Computer Vision, Graphics and Image Processing, Guwahati, 2016
  Korean Conference on Computer Vision, 2016
  ICCV Workshop on 3D Recognition and Representation, 2015
  International Conf. on Control, Automation, Robotics and Vision, 2014
  Int'l Conf on Three Dimensional Vision (3DV), 2014
  Dennis Moore Oration, University of Western Australia, 2013
  Digital Image Computing: Techniques and Applications, 2012
  International Workshop on Gaze Sensing and Interactions, 2010
  IEEE Workshop on Visual Surveillance, 2009
  Digital Image Computing: Techniques and Applications, 2007
  Visualisation, Imaging and Image Processing, 2007
  International Symposium on 3D Analysis of Human Movement, 2002

- **Invited lectures**:
  Imperial College, 2016
  University of Oxford, 2016
  UCL, 2014
  DSTO (Defence Science and Technology Organisation), 2013
  NICTA/ANU summer workshop, 2013
  National University of Singapore, 2013
  Nanyang Technological University, 2011
  CPNI Group of Experts in Vision Systems, 2011
  University of Lincoln, 2010
  British Machine Vision Association, 2010
  University College, London, 2010
  ETH Zurich, 2009
  University of Western Australia, 2009
  University of Zaragoza, 2008
  General Electric, 2005
  Gillette Ltd, 2003
  University of Western Australia, 2004

University of Caceres, 2000
Politecnica de Madrid Facultad de Informatica, 1999
Edinburgh University Dept of Artificial Intelligence, 1999
University of Adelaide Dept of Computer Science, 1999
British Machine Vision Association, Photogrammetry Society, 1996
Jet Propulsion Labs, Pasadena, 1994
Toshiba, 1993
University of Osaka, 1993
Fujitsu, 1993
International Conference on Intelligent Robots and Systems, Yokohama, 1993

- **Editorial Board**:
    IEEE Transactions on Pattern Analysis and Machine Intelligence, 2010-present
    Computer Vision and Image Understanding, 2013-present
    Image and Vision Computing Journal, 2008-2013
    IPSJ Transactions on Computer Vision and Applications, 2008-2012
    Electronic Letters in Computer Vision and Image Analysis, 2007-2011

- **Conference/Workshop Organisation**:
    General Chair, Asian Conference on Computer Vision 2018
    Program Chair, 3DV, 2016
    Program Chair, Asian Conference on Computer Vision, 2014
    Organiser, CVPR Workshop, Semantics for Structure from Motion, Localisation and Mapping, 2015
    Co-organiser, ECCV Workshop, Benchmarking multi-target tracking, 2016
    Co-organiser, WACV Workshop, Benchmarking multi-target tracking, 2015
    Co-organiser, RSS Workshop, The problem of mobile sensors: Setting future goals and indicators of progress for SLAM, 2015

- **Conference Area Chair/Associate Editor**:
    Robotics Science and Systems (2014, 2017)
    International Conference on Computer Vision (2013, 2015, 2017)
    Asian Conference on Computer Vision *Awards Committee* (2012)
    European Conference on Computer Vision (2002, 2008, 2014)
    Asian Conference on Computer Vision (2004, 2009, 2016)
    Int'l Conference on Robotics and Automation (2008, 2009, 2011, 2012)
    International Conference on Pattern Recognition (2012)
    British Machine Vision Conference (2000, 2005, 2012)
    Digital Image Computing: Techniques and Applications (2012, 2013)

- **Conference/Workshop Programme Committee**:
    IEEE International Workshop on Socially Intelligent Surveillance and Monitoring (2011)
    Workshop on Gaze Sensing and Interaction (2010)
    Visual Surveillance workshop (2010)
    THEMIS Workshop (2008, 2009)
    Iberian Conf on Pattern Recognition and Image Analysis (2003, 2004)
    Int'l Workshop on Vision Algorithms (1999)

- **Conference Programme Committee/Review Panel**:
    Computer Vision and Pattern Recognition (2003, 2004, 2005, 2008, 2009, 2010, 2011, 2012, 2013, 2015),
    European Conf. on Computer Vision (2004, 2010),
    International Conf on Computer Vision (2003, 2005, 2009, 2011)
    International Conference on Pattern Recognition (2000, 2004)

- **Journal review:**
    International Journal of Computer Vision
    IEEE Transactions on Pattern Analysis and Machine Intelligence
    Computer Vision and Image Understanding

Image and Vision Computing
Machine Vision and Applications

- **Consultancy:**
    Bristows LLP, Expert witness UK High Court (*Phillips vs Nintendo*) 2013-2014
    Motor Accident Commission of South Australia, 2013
    Luizhou Lanhai Technology, 2012
    Formula One Management Ltd, 2011-2012
    Oxford Risk, 2010-2013
    LightningFish Games, 2010
    Unilever Ltd, 2007-2008
    Qinetiq Ltd, 2006-2007
    Tracab AB, 2006-2007
    Prosurgics Ltd, 2006
    GE Global Research, 2005
    Gillette, 2002

- **Executive Committee** , British Machine Vision Association, 2008-2012
- **Member**, Institute Electrical and Electronic Engineers
- **Chairman and organiser**, Robotics Research Group Seminar programme (1997–99)

Administrative Duties

- **University of Adelaide, School of Computer Science**
    Postgraduate Coordinator, 2016-
    School Research Coordinator, 2013-2015
- **University of Oxford, Dept of Engineering Science**
    Director of Graduate Studies, 2010-2012
    Convener, Information Engineering Panel, 2005-2009
    Chairman, Computer Support Committee, 2008-2009
    Engineering and Computer Science Standing Committee, 2004-2009
    Departmental "Headstart" programme (co-organiser with Dr Frew and Dr Hamilton), 2004-2007

- **Exeter College**
    Acting Rector (Head of House), Trinity Term 2008
    Sub-rector (Dean), Apr 2005 – Sep 2008
    Computing Fellow, Oct 2002 – Sept 2012
    Joint College/University Information Technology Group, 2001-2009

Undergraduate Teaching

- **University of Adelaide, Lecturing**
    1st yr, Small Group Discovery Experience, Numerical Computing, 2015
    3rd yr, Artificial Intelligence, 2013, 2016
    4th yr, Computer Vision, 2013-2017

- **University of Oxford, Lecturing**

    3rd yr Object Oriented Programming, **new course**, 4 Information Engineering Lectures + 5 hours labs, 2011–2012
    3rd yr Structured Programming, **new course**, 4 Information Engineering Lectures, 2010-2012
    3rd yr Software Engineering, **new course**, 4 Information Engineering Lectures, 2008–2009
    1st yr, Introduction to Computing, 2 **Core lectures** + 20 hours of labs, 2000–2003, 2006–2009
    4th yr Computer Vision, 4 Information Engineering lectures, 2003, 2005–2012
    3r yr Applied Estimation, 8 Information Engineering lectures + 2 hours of labs, 1999–2003

3rd yr Computer Architecture, **new course**, 4 **Core lectures** on interfacing devices to computers, 2001–2003
2nd yr Vector Algebra and Calculus, 8 **Core lectures** in mathematics, 2003, 2006–2009
3rd yr Computational Geometry, 4 Information Engineering lectures, 2003
2nd yr C/C++ coursework module, **new course**, 5 mini-lectures + 30 hours labs, 1999–2009

- **Exeter College Tutorials:**
  I was the senior Engineering tutor and course coordinator at Exeter College from 2000-2012 and until 2003 I was the only official fellow in Engineering Science, where we aimed to take 6 students per annum. I taught the Engineering Mathematics, Electrical/Electronic, and Computing and Control topics to all years. My load was 6-7 tutorial contact hours per week.

Postgraduate supervision

18 complete D.Phil./PhD, 1999-2015
2 complete MSc, 2002-2012
Currently supervising 5 D.Phil. candidates, 3 as lead supervisor.

Examination

Examiner for Engineering (and joint schools) Final Honour School, 2003-2005
Chairman of Engineering and Computer Science Examiners, 2004
D.Phil. internal examiner, 21 theses, 1995-2016
PhD external examiner, 26 theses, 1997-2016

Grants

		Title	Dates	AU$K	
1	DAAD Travel	Multi-target tracking in crowded scenes	2017-2018	25	**Lead Chief Investigator**
2	ARC LIEF	Computational infrastructure for developing deep machine learning models	2016	384	**Lead Chief Investigator**
3	DST Group	Scene Understanding from Drone Images of Urban Environments	2016	74	**Lead Chief Investigator**
4	ARC Linkage Project	Visual sensing for localisation and mapping in mining	2015-2018	360	**Lead Chief Investigator,** with Dr T-J Chin
5	Cooperative Research Centre	Data to Decisions	2014-2019	5600	**Chief Investigator,** with Prof A. Van den Hengel (who is Adelaide node director), UniSA, UNSW, Deakin. Total grant $25M; Total project value including industry contributions, $88M.
6	ARC Centre of Excellence	Robotic Vision	2014-2021	6711	**Chief Investigator, Deputy Director and Theme Leader,** with Peter Corke (Director, QUT), ANU and Monash. Total grant $25.64M.

7	ARC Laureate Fellowship	Life-long Computer Vision Systems	2013-2018	3700	**Lead Chief Investigator**
8	ARC Linkage Project	Visual tracking with environmental constraints	2013-2016	525	**Chief Investigator,** with Dr A. Dick
9	ARC Linkage Project	Accessing Australia's Photographic History	2013-2015	150	**Chief Investigator**, with Prof A. Van den Hengel
10	ARC Discovery Project	Recognising and reconstructing objects in real-time from a moving camera	Jan 13 – Dec 15	346	**Lead Chief Investigator**
11	ARC LIEF	Unlocking large-scale image-based machine learning	Jan 13 – Dec 15	220	**Chief Investigator**, with Prof A. van den Hengel et al.

		Title	Dates	£K	
1	EU Framework 7	REWIRE: Rehabilitative Wayout In Responsive home Environments	Oct 11 – Sept 14	284	**Principal Investigator**
2	Oxford Risk	Application of behavioural science to visual surveillance (part II)	July 10 – June 12	157	**Principal Investigator**
3	EPSRC EP/H050795/1	Long-term Higher-order Visual Mapping	June 10 – May 14	780	**Principal Investigator**
4	Oxford Risk	Application of behavioural science to visual surveillance (part I)	Oct 08 – Sep 10	20	**Principal Investigator**
5	EPSRC EP/C007220/1	Automatic generation of content for 3D displays	Jun 06 – Jan 09	161	**Principal Investigator**
6	EU Framework 6	HERMES: Human Expressive Representations of Motion and their evaluation in Sequences	Apr 06 – Aug 09	278	**Principal Investigator.** STREP collaboration with Universitat Autonoma de Barcelona (Spain), Universitat Karlsruhe (Germany), Aalborg University (Denmark), ETH Zurich (Switzerland), European Space Agency (France/Netherlands), Answare Technologies (Spain), total budget €2M
7	Royal Society International Joint Project	Pushing the theoretical and practical limits of advanced SLAM systems	Jan 06 – Mar 08	12	**Principal Investigator.** With Prof. Juan Domingo Tardos, University of Zaragoza, Spain
8	EPSRC Platform Grant EP/D037077/1	Platform Grant in Computer Vision	Oct 05 – Sep 10	420	**Joint principal investigator** with Prof. D. Murray, Dr P. Newman and Prof. A. Zisserman
9	EPSRC GR/T24685/04	Real-Time Camera Localisation in Real Environments	Jan 05 – Dec 07	247	**Principal Investigator**
10	Servowatch UK, Ltd	A Stabilised Search and Rescue Camera System"	Jan 05 – Dec 08	63	**Principal Investigator**
11	EPSRC GR/R89080/01	Real-Time Ego-Motion Estimation for a Single Camera'	Jan 03 – Mar 04	60	**Principal Investigator**
12	EPSRC GR/R59588/01	Incorporating constraints into a framework for estimating vision	Aug 01 – Sep 01	7	**Co-investigator** with D.W. Murray

13	EU Framework 5	EVENTS: Computer Vision Enables Non-constrained Transmission of Scenarios	Oct 00 – Jan 04	220	**Principal Investigator.** FP5 collaboration with Eptron SA (Spain), INRIA-Grenoble (France), Siemens (Germany), Via Digital (Spain), budget £1M
14	EPSRC/Link, GR/M15262	Control of 3D performance animation by unencumbered actors	Sep 98 – Mar 01	169	**Principal Investigator** from Sep 99
15	Acciones Integradas (British Council)	Analysis of image sequences based on optical flow	Apr 98 – Mar 00	6	**Principal Investigator.** With Dr Luis Baumela, Politecnica de Madrid, Spain
16	EPSRC GR/A00270/01	Active Visual Understanding of Dynamic Scenes via Deliberate Robotic Interaction	Oct 97 - Sep 00	110	**Principal Investigator.** Advanced Research Fellowship
17	Technology Foresight grant FCA 472 A/95	Automated measurement and visualisation in retailing	Jun 97 – May 00	250	**Co-Investigator** with A. Zisserman

(Note: row above table top shows "parameters with high precision" as a continuation cell.)

Publications

Notes:
- 13050 citations *(source Google Scholar, 10/1/2017)*
- 32 papers with citation counts of 100 or more *(source Google Scholar, 10/1/2017)*
- H-index 56 (*source Google Scholar, 10/1/2017)*

Journal articles (internationally peer reviewed)

1. Cesar Dario Cadena Lerma, Luca Carlone, Henry Carrillo, Yasir Latif, Davide Scaramuzza, Jose Neira, **Ian Reid** and John Leonard, "Past, Present, and Future of Simultaneous Localization And Mapping:
Towards the Robust-Perception Age", accepted to IEEE Transactions on Robotics, 2016
2. Fayao Liu, Chunhua Shen, Anton Van Den Hengel and **Ian Reid**, Online Unsupervised Feature Learning for Visual Tracking, Image and Vision Computing Journal, 2016
3. F. Liu, C. Shen, G. Lin and **I. Reid** , "Learning Depth from Single Monocular Images Using Deep Convolutional Neural Fields ", IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015
4. V. A. Prisacariu, O Kaehler, D. W. Murray, **I. D. Reid**, "Real-time 3D Tracking and Reconstruction on Mobile Phones", IEEE Trans. On Visualization and Computer Graphics, vol. 21, no. 5, May 2015
5. C. Ren, V. Prisacariu and **I. Reid**, "Regressing Local to Global Shape Properties for Online Segmentation and Tracking", International Journal of Computer Vision, vol 103, num 3, Feb 2014
6. A. Patron, M. Marszalek, **I. D. Reid**, A. Zisserman, "Structured learning of human interactions in TV shows", IEEE Transactions on Pattern Analysis and Machine Intelligence, vol 34, no 12, 2012.
7. Nicola Bellotto, Ben Benfold, Hanno Harland, Hans-Hellmut Nagel, Nicola Pirlo, **Ian Reid**, Eric Sommerlade, Chuan Zhao, "Cognitive visual tracking and camera control", Computer Vision and Image Understanding, vol 116, no 3, 2012.
8. V. Prisacariu and **I. Reid**, "PWP3D: Real-time Segmentation and Tracking of 3D Objects", International Journal of Computer Vision, vol 98, no 3, 2012
9. V. Prisacariu and **I. Reid**, "3D hand tracking for human-computer interaction", Image and Vision Computing, vol 30, no 3, 2012
10. B. Williams, G. Klein and **I. Reid**, "Automatic Relocalisation and Loop Closing for Real-Time Monocular SLAM", IEEE Transactions on Pattern analysis and Machine Intelligence, vol 33, no 9, 2011

11. N. Robertson and **I. Reid**, "Automatic Reasoning about Causal Events in Surveillance Video", EURASIP Journal of Image and Video Processing, Article ID 530325, 2011
12. C. Mei, G. Sibley, M. Cummins, P. Newman and **I. Reid**, "RSLAM: A System for Large-Scale Mapping in Constant-Time using Stereo", Int. Journal of Computer Vision *(special issue on BMVC 2009),* vol 94, no 2, 2010
13. G. Sibley, C. Mei, **I. Reid** and P. Newman, "Vast Scale Outdoor Navigation Using Adaptive Relative Bundle Adjustment", vol. 29, no. 8, Int. Journal of Robotics Research, 2010
14. O. Woodford, P. Torr, **I. Reid** and A. Fitzgibbon, "Global Stereo Reconstruction under Second Order Smoothness Priors", IEEE Transactions on Pattern Analysis and Machine Intelligence, vol 31, no 12, 2009
15. K. Connor and **I. Reid**, "Multiview segmentation and tracking of dynamic occluding layers", Journal of Image and Vision Computing, vol. 28, no. 6, June 2009.
16. G. Deacon, M. Street, J. Holdback, J. Taylor, M. Pearce, D. Maiwand, A. Harwood and **I. Reid**, "The Pathfinder Image-Guided Surgical Robot", Journal of Engineering in Medicine, vol 224, no 5, 2010.
17. Brian Williams, Mark Cummins, Jose Neira, Paul Newman, **Ian Reid** and Juan Tardos "A comparison of loop closing techniques in monocular SLAM", in Robotics and Autonomous Systems, vol 57, no. 12, December 2009
18. Paul Newman, Gabe Sibley, Mike Smith, Mark Cummins, Alastair Harrison, Christopher Mei, Ingmar Posner, Robbie Shade, Derik Schroter, Liz Murphy, Winston Churchill, David Cole and **Ian Reid**, "Navigating, Recognising and Describing Urban Spaces With Vision and Laser*",* International Journal of Robotics Research, vol 28, no 11-12, 2009
19. P. A. Tresadern and **I. D. Reid**, "Video synchronization from human motion using rank constraints" Computer Vision and Image Understanding vol 113, no 8, August 2009
20. Ali Shahrokni, Oliver Woodford and **Ian Reid**, Temporally-coherent Novel Video Synthesis Using Texture-based Priors, in press, IPSJ Transactions on Computer Vision and Applications *(special issue on ACCV 2007)*, 2009
21. P. Tresadern and **I. Reid**, "Camera Calibration from Human Motion", Journal of Image and Vision Computing, vol. 26, no. 6, June 2008.
22. A. Davison, **I. Reid**, N. Molton and O. Stasse, "MonoSLAM: Real-time Single Camera SLAM", IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 29, no. 6, pp 1052-1067, 2007.
23. N. Robertson and **I. Reid**, "A general method for human activity recogniton in video", Journal of Computer Vision and Image Understanding, Vol. 104, No. 2 pp. 232-248, 2006.
24. J. Knight and **I. Reid**, "Automated alignment of robotic pan-tilt camera units using vision", Int'l Journal Computer Vision, Vol. 68, No. 3 pp. 219-237, 2006.
25. T. Rodriguez, **I. Reid** and R. Horaud, "Image Interpolation for Virtual Sports Scenarios", Machine Vision and Applications Journal. Vol. 16, No. 4. Sept. 2005, pp 236-245.
26. J. Deutscher and **I. D. Reid**, "Articulated body motion capture by stochastic search", Int'l Journal of Computer Vision, 61(2), 2005.
27. L. Agapito, E. Hayman and **I. D Reid**, "Self-calibration of rotating and zooming cameras", Int'l Journal of Computer Vision, 45(2), pp107-127, 2001.
28. R. L. Thompson, **I. D. Reid**, L. A. Munoz and D. W. Murray, "Providing synthetic views for teleoperation using visual pose tracking in multiple cameras", IEEE Transactions on Systems, Man and Cybernetics, vol 31(1), pp 43--54, 2001.
29. A. Criminisi, **I. D. Reid** and A. Zisserman, "Single view metrology", International Journal of Computer Vision, vol. 40(2), pp 123--148, 2000.
30. A. Criminisi, **I. D. Reid** and A. Zisserman, "A plane measuring device", Journal of Image and Vision Computing, vol. 17, pp 625--634, 1999.
31. D. W. Murray, **I. D. Reid** and A. J. Davison, "Steering without representation using active fixation", Perception, vol. 26, 1998.
32. S.M. Fairley, **I.D. Reid** and D.W. Murray, "Transfer of Fixation using Affine Structure: Extending the Analysis to Stereo", International Journal of Computer Vision, vol. 29, no. 1, 1998.
33. K. J. Bradshaw, **I. D. Reid** and D. W. Murray, "The active recovery of 3D motion trajectories and their use in prediction", IEEE Pattern Analysis and Machine Intelligence, vol. 19, no. 3, 1997.
34. P. F. McLauchlan, S. M. Fairley, **I. D. Reid** and D. W. Murray, "The Pipe-Group Architecture for Real-Time Active Vision", Journal of Real-Time Imaging, vol. 3, 1997.
35. **I. D. Reid** and D. W. Murray, "Active tracking of foveated feature clusters using affine structure", International Journal of Computer Vision, vol. 18, no. 1, 1996.
36. **I. D. Reid**, "Projective calibration of a vehicle-mounted triangulation range finder", in Journal of Image and Vision Computing, vol. 14, no. 9, 1996.

37. **I. D. Reid** and P. A. Beardsley, "Self-alignment of a binocular robot", in Journal of Image and Vision Computing, vol. 14, no. 8, 1996.
38. **I. D. Reid** and J. M. Brady, "Recognition of object classes from range data", Artificial Intelligence Journal, vol. 78, no.s 1-2, pp. 289--326, (Special Issue on Computer Vision), October 1995.
39. D. W. Murray, P. F. McLauchlan, K. J. Bradshaw, **I. D. Reid** and P. M. Sharkey, "Driving saccade to pursuit using image motion", International Journal of Computer Vision, Vol 16, No 3, 1995.
40. F. Chenavier, **I. D. Reid** and J. M. Brady, "Recognition of Parameterized Objects from 3D data: a Parallel Implementation", Journal of Image and Vision Computing, Vol 12, No 9, 1994.
41. P. M. Sharkey, D. W. Murray, S. Vandevelde, **I. D. Reid** and P. F. McLauchlan, "A Modular Head/Eye Platform for Real-time Reactive Vision", Mechatronics Journal, Vol 3, No 4, 1993.
42. K. J. Bradshaw, P. F. McLauchlan, **I. D. Reid** and D. W. Murray "Saccade and Pursuit on an Active Head/Eye Platform", Journal of Image and Vision Computing, Vol 12, No 3, 1994.
43. **I. D. Reid** and J. M. Brady, "Model-Based Recognition and Range Imaging for a Guided Vehicle", Journal of Image and Vision Computing, Vol 10, No 3, April 1992.

Conference articles (internationally peer reviewed)

44. Z. Ge, C. McCool, C. Sanderson, P. Wang, L. Liu, **I. Reid**, P. Corke, "Exploiting Temporal Information for DCNN-based Fine-Grained Object Classification", DICTA 2016 ***[Best Paper]***
45. Ravi Garg, Vijay Kumar BG, Gustavo Carneiro, **Ian Reid**, "Unsupervised CNN for Single View Depth Estimation: Geometry to the Rescue", ECCV 2016
46. Cesar Cadena, Yasir Latif and **Ian Reid**, "Measuring the Performance of Single Image Depth Estimation Methods" IROS 2016
47. Trung Pham, Markus Eich, Ian Reid and Gordon Wyeth, "Geometrically Consistent Plane Extraction for Dense Indoor 3D Maps Segmentation", IROS 2016
48. Cesar Cadena and **Ian Reid**, Multi-modal Auto-Encoders as Joint Estimators for Robotics Scene Understanding, Robotics: Science and Systems, 2016
49. Vijay Kumar B G, Gustavo Carneiro, **Ian Reid**, Learning Local Image Descriptors with Deep Siamese and Triplet Convolutional Networks by Minimising Global Loss Functions, CVPR 2016
50. Guosheng Lin, Chunhua Shen, Anton van den Hengel, **Ian Reid**, "Efficient Piecewise Training of Deep Structured Models for Semantic Segmentation", CVPR 2016
51. Trung T. Pham, Seyed Hamid Rezatofighi, **Ian Reid** and Tat-Jun Chin, "Efficient Point Process Inference for Large-Scale Object Detection", CVPR 2016
52. Seyed Hamid Rezatofighi, Anton Milan, Zhen Zhang, Qinfeng Shi, Anthony Dick, **Ian Reid**, "Joint Probabilistic Matching Using m-Best Solutions", CVPR 2016
53. Bohan Zhuang, Guosheng Lin, Chunhua Shen, **Ian Reid**, "Fast Training of Triplet-based Deep Binary Embedding Networks", CVPR 2016
54. Jae-hak Kim, Cesar Cadena, **Ian Reid**, "Direct Semi-dense SLAM for Rolling Shutter Cameras", ICRA 2016
55. T. T. Pham, **I. Reid**, S. Gould, Y. Latif "Hierarchical Higher-order Regression Forest Fields: An Application to 3D Indoor Scene Labelling ", ICCV 2015
56. Seyed Hamid Rezatofighi, Anton Milan, Zhen Zhang, Qinfeng Shi, Anthony Dick, **Ian Reid,** "Joint Probabilistic Data Association Revisited", ICCV 2015
57. A. Milan, L. Leal-Taixe, K. Schindler and **I. D Reid**, "Joint Tracking and Segmentation of Multiple Targets", in proc. IEEE Computer Vision and Pattern Recognition, June 2015
58. A. Eriksson, T. Pham, T-J Chin and **I. D. Reid**, "The k-Support Norm and Convex Envelopes of Cardinality and Rank, in proc. IEEE Computer Vision and Pattern Recognition, June 2015
59. C. Cadena, A. Dick and **I. D. Reid, "**A Fast, Modular Scene Understanding System using Context-Aware Object Detection", in proc. International Conf. on Robotics and Automation, 2015
60. C. Ren V. Prisacariu, O Kaehler, **I. Reid** and D. Murray, "3D Tracking multiple objects with identical appearance using RGB-D input", International Conf on 3D Vision, Dec 2014 ***[Best paper award]***
61. O. Kaehler and **I. D. Reid**, "Efficient 3D Scene Labeling Using Fields of Trees", in proc. IEEE Int'l Conf. on Computer Vision, Dec 2013
62. C. Y. Ren, V. A. Prisacariu, D. W. Murray and **I. D. Reid**, "STAR3D: Simultaneous Tracking And Reconstruction of 3D Objects Using RGB-D Data", in proc. IEEE Int'l Conf. on Computer Vision, Dec 2013
63. A. V. Segal and **I. D. Reid**, "Latent Data Association: Bayesian Model Selection for Multi-target Tracking", in proc. IEEE Int'l Conf. on Computer Vision, Dec 2013

64. V. A. Prisacariu, O. Kahler, D. W. Murray and **I. D. Reid,** "Simultaneous 3D Tracking and Reconstruction on a Mobile Phone", in proc. Int'l Symp. on Mixed and Augmented Reality, Oct 2013

65. A. Dame, V. A. Prisacariu, C. Y. Ren and **I. D. Reid**, "Dense Reconstruction Using 3D Object Shape Priors", in proc. IEEE Computer Vision and Pattern Recognition, June 2013

66. V. Prisacariu and **I. Reid**, "Simultaneous monocular 2D segmentation, 3D pose recovery and 3D reconstruction", in proc. Asian Conf. on Computer Vision, 2012

67. Yuzuko Utsumi, Eric Sommerlade, Nicola Bellotto and **Ian Reid**, "Cognitive Visual Tracking and Camera Control", in proc. International Conf on Robotics and Automation, 2012

68. Henry Carillo, **Ian Reid** and Jose A. Castellanos, "On the comparison of uncertainty criteria for active SLAM", in proc. International Conf on Robotics and Automation, 2012

69. Y. C. Ren, V. Prisacariu and **I. Reid**, "Regressing Local to Global Shape Properties for Online Segmentation and Tracking", British Machine Vision Conference, 2011.

70. B. Benfold and **I. D. Reid**, "Unsupervised Learning of a Scene-Specific Coarse Gaze Estimator", accepted for IEEE International Conference on Computer Vision, 2011

71. A. Flint, D. W. Murray and **I. D. Reid**, "Manhattan Scene Understanding Using Monocular, Stereo, and 3D Features", accepted for IEEE International Conference on Computer Vision, 2011

72. V. Prisacariu and **I. D. Reid**, "Shared Shape Spaces", accepted for IEEE International Conference on Computer Vision, 2011

73. B. Benfold and **I. D. Reid**, "Stable Multi-Target Tracking in Real-Time Surveillance Video", in proc. IEEE Computer Vision and Pattern Recognition, 2011

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