

# Richard J. D. Moore

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**BIRTHPLACE** Melbourne, Australia (13/10/1984)

**CONTACT INFORMATION** e: rjdmoore | uqconnect.edu.au  
w: <http://rjdmoore.net>

**WHAT I DO** I design algorithms for autonomous systems, and specialise in computer vision and visual guidance. My background is in robotics and bioinspired systems, and I am excited by cross-disciplinary applications for autonomous systems. I love being outdoors, and regularly hike, ski, and travel on weekends.

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**TECHNICAL SKILLS**

• C/C++ / Java / Python	• Linux / Windows / $\mu$ C platforms	• Matlab
• Real-time algorithms	• Computer vision / image processing	• Machine learning
• Autonomous systems	• Guidance / navigation / control	• Video augmentation
• Project management	• Functional safety / error analysis	• $\LaTeX$ / HTML

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**ACADEMIC BACKGROUND**

**University of Queensland, St Lucia, QLD** Jun 2008 – Jul 2012  
Doctor of Philosophy

- Thesis: Vision systems for autonomous aircraft guidance ([http://bit.ly/rjdmoore\\_thesis](http://bit.ly/rjdmoore_thesis)).
- Advisors: Prof. Mandyam Srinivasan & Prof. Gordon Wyeth.

**Swinburne University of Technology, Hawthorn, VIC** Mar 2003 – Nov 2007  
BSci (Research & Development) / BEng (Electronics & Computer Systems)

- Graduated with Honours with Highest Distinction (88% average).

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**PROFESSIONAL EXPERIENCE**

**Valeo Vision Systems, Galway, Ireland**

Vision Research Engineer (Function Owner, CV Department) Feb 2015 – Present

- Designing and implementing smart vision systems for automotive industry.

**Harvard University, Cambridge, MA**

Postdoctoral Research Fellow Sep 2012 – Sep 2014

- Developing a vision-based guidance system for an insect-size aerial robot (the RoboBee).

**University of Queensland, St Lucia, QLD**

Research Officer (Research Academic Level A) Jul 2012 – Sep 2012

- Developing and implementing visual guidance algorithms for an autonomous aircraft.

**Swinburne University of Technology, Hawthorn, VIC**

Student Vacation Scholar Nov 2007 – Feb 2008

- Studying elastic linear molecules' rotational viscosities using molecular dynamics simulations.

Student Vacation Scholar Nov 2006 – Feb 2007

- Implementing and testing the SwinDeW-G workflow enactment service in a grid environment.

**CSIRO Industrial Physics, Lindfield, NSW**

Industrial Trainee Mar 2006 – Jul 2006

- Impact characterisation / localisation system for NASA's Ageless Aerospace Vehicle.

Student Vacation Scholar Nov 2005 – Mar 2006

- Reducing noise associated with high-temperature superconducting Nb/YSZ/Nb ramp-type Josephson junctions, and fabricating single junction devices.

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**PUBLICATIONS** I have multiple peer-reviewed publications in respected international journals and proceedings. My articles and their citation metrics are available at [http://bit.ly/rjdmoore\\_cites](http://bit.ly/rjdmoore_cites). For reference, a list of citation metrics for top robotics publications can be found at [http://bit.ly/robotics\\_pubs](http://bit.ly/robotics_pubs).

AWARDS	<b>ACEVS Postgraduate Top-up Scholarship</b>	<b>Jun 2011 – Jul 2012</b>
	ARC Centre of Excellence in Vision Science	
	<b>Australian Postgraduate Award</b>	<b>Jun 2008 – Jul 2012</b>
	University of Queensland	
	<b>QBI Postgraduate Top-up Scholarship</b>	<b>Jun 2008 – Jun 2011</b>
	Queensland Brain Institute	
	<b>Vice-chancellor’s Scholarship for Engineering</b>	<b>2003 – 2007</b>
	Swinburne University of Technology	

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PROFESSIONAL INVOLVEMENT	<b>Committees</b>	
	ICRA 2014 session co-chair	<b>Jun 2014</b>
	Organiser 2 <sup>nd</sup> annual Northeast Robotics Colloquium	<b>Oct 2013</b>
	Organising committee ACEVS Young Visionaries	<b>Sep 2010 – Oct 2011</b>
	<b>Memberships</b>	
	IEEE/RAS member	<b>Dec 2009 – Present</b>
	ACEVS Young Visionaries	<b>Jun 2008 – Sep 2012</b>
	IEAust student member	<b>Mar 2003 – Jun 2008</b>
	<b>Refereeing</b>	
	IEEE/RAS International Conference on Robotics and Automation	<b>2010 – 2015</b>
	J. Sensors	<b>2014</b>
	IEEE/RAS Robotics & Automation Magazine	<b>2012; 2014</b>
	IEEE/RSJ International Conference on Intelligent Robots and Systems	<b>2009; 2011</b>
	J. Biological Cybernetics	<b>2011</b>
	ARAA Australasian Conference on Robotics and Automation	<b>2010</b>
	<b>Supervision</b>	
Harvard University, Research Experiences for Undergraduates Program (Z. Hargreaves, O. Afolabi)	<b>Jun 2013 – Aug 2013</b>	

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PERSONAL INTERESTS Outside of my research, I enjoy hiking, skiing, cycling, travelling, and playing various codes of sport. My achievements include multiple national beach sprinting titles, as well as representing my club (Anglesea SLSC) at the World Surf Lifesaving Championships (Rescue’06).

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REFEREES	<b>Prof. Radhika Nagpal</b>
	Fred Kavli Professor of Computer Science, School of Engineering and Applied Sciences & Wyss Institute for Biologically Inspired Engineering, Harvard University
	Address: 235 Maxwell Dworkin 33 Oxford St, Cambridge MA 02138
	<b>Prof. Mandyam V. Srinivasan</b>
	Professor of Visual Neuroscience, Queensland Brain Institute & School of Information Technology and Electrical Engineering, University of Queensland
	Address: Queensland Brain Institute (Building 79) St Lucia, QLD 4072
	<b>Prof. Gordon F. Wyeth</b>
	Professor & Head of School, School of Electrical Engineering and Computer Science, Queensland University of Technology
	Address: QUT Faculty of Science and Engineering Brisbane, QLD 4000