

Dr Chris Gaskett

PhD (systems engineering), PMP

BE (comp. sys. eng.), BAppSci (comp. sci.)

member PMI



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Takamatsu, Kagawa, Shikoku, Japan (日本香川県高松市)

SKILLS SUMMARY

- Project management including traditional ideas, agile/iterative/adaptive approaches, and beginning critical chain. Collaboration on international projects. Japanese language skills.
- Software development in Java, ANTLR, c++, Ruby (including Rails), Python, R, Scheme; under Unix, MS Windows, VxWorks, Mac OS X.
- Test driven development, version control (Git, Subversion); web and application development, realtime systems, vision systems, control systems, learning systems.
- Research skills including discovering and comparing prior work, developing novel solutions, experimental design, statistical analysis, reporting results.
- Communication skills including writing for various audiences, public speaking, discussing technical issues with lay-people, and media liaison.
- Teaching, including curriculum development; coordinating national/international delivery of subjects.

EXPERIENCE

Technical Lead, CoolRock Software, Melbourne Australia
(Previously Senior Software Engineer)

**Nov 2008-
April 2007-Oct 2008**

- Second developer in a technology startup, funded through venture capital
- Project management for internal and customer deployment projects
- Email archiving and discovery software development in Java (Spring, RMI), c++ (mapi), c#
- Designed and implemented an IMAP server using ANTLR parser/lexer and mina

**Lecturer (tenured), School of Maths, Physics and Information Technology,
James Cook University, Cairns, Australia**

Feb 2004-Mar 2007

- Lecturing in project management, c++, unix, and database systems
- Development and coordination for project management subjects. Developed an industry projects scheme for students — leading to a national award (Carrick Citation) for outstanding contributions to student learning.
- Developed project subject contents, 50% traditional (PMBOK), 50% agile/iterative/adaptive
- Managed project subject delivery across Cairns, Townsville, Sydney, and Singapore campuses
- Coordinated student supervision by lecturers in Cairns to support student projects
- Carried out on-site review of School of IT organisation and lecturing at the Singapore campus
- Deployed wiki system for staff knowledge management, student project coordination (PMIS), added account management from university LDAP server (development in Python)
- Research on teaching in IT, and arachnid behaviour (including development of simulations in Ruby under Mac OS X)

**Research Engineer, Department of Humanoid Robotics and Computational Neuroscience,
Advanced Telecommunications Research Institute International (ATR International),
Kyoto, Japan Jul 2002-Feb 2004**

- Research on reaching strategies for a humanoid robot with active stereo vision
- Included learning system implementation (Kohonen self-organising map)
- Distributed system development in C++ and Scheme under MS Windows and VxWorks (real-time OS)
- Please see <http://chris.gaskett.com/research/> for published papers and videos

**Associate Researcher, Active Safety Laboratory,
Toyota Central Research and Development Laboratories, Nagoya, Japan Jul 2001-Jun 2002**

- Research on identifying road regions through stereo vision
- Post processing of human gaze direction data from seeingmachines FaceLAB, leading to Japanese patent.
- Creating tools for use by other team members, development in MS Visual C++

(Australian Postgraduate Award PhD scholarship) 1998-2001

- Please see education section for details.
- Development in Java, C++ under MS Windows, Unix, VxWorks

Salesperson, InterTan Australia (Tandy) 1994-1996

- Retail hardware sales, modifications, and repairs.
- Included sales and customer service training

Roll Film Inspector, Kodak Australasia Jan, Feb 1993

- Quality control tasks. Roll film fault detection, microscopic inspection of film

Computer Technician, Northern Metropolitan College of TAFE, Preston, Epping 1991-1992

- Hardware installation, testing, repair

EDUCATION

PhD in Systems Engineering, "Q-Learning for Robot Control" 1998-2002

Supervisor: Professor Alexander Zelinsky,
Systems Engineering, The Australian National University (ANU), Canberra
Development of a control system for using reinforcement learning.
Electronics design for the Kambara autonomous underwater vehicle

Bachelor Degree in Computer Systems Engineering 1993-1997

with first-class honours, Royal Melbourne Institute of
Technology University (RMITU)
Fault trees and FMEA for fault finding (VDO instruments)

Bachelor Degree in Computer Science 1993-1997

with distinction, RMITU, Melbourne
Speaker independent speech recognition using neural networks

Undergraduate results: 32 High Distinctions, 16 Distinctions, 4 Credits, no lower grades.
Complete transcripts of results for undergraduate subjects are available on request.

OTHER SUBJECTS, CERTIFICATIONS, AND COURSES COMPLETED

Project Management Professional (PMP) Certification Project Management Institute (PMI)	January 2008
Enterprise Database Systems—Oracle 10g Led by Dr Carrie Lui, one semester at JCU (completed informally)	2006
Teaching courses and graduate supervision courses at JCU	2004-2006
Japanese Language Proficiency Test, Level 4 Certified	2003
Machine Learning graduate course Led by Dr Jonathan Baxter and Dr Peter Bartlett, ANU. Section on intelligent control systems including neural networks and fuzzy control delivered by myself.	2000
Australian Music Examination Board, music theory and practice level 4	1992

AWARDS

Carrick Citation for Outstanding Contributions to Student Learning National award from the Carrick institute, a government scheme for promoting excellence in university teaching. Awarded for <i>“creation of industry project subjects that cultivate practical skills for understanding problems and managing risks, supported by collaborative tools for peer review and reflection.”</i>	2006
JCU Inclusive Practice Award Based on nominations and votes from users of JCU disability support service. Teaching experience includes students with hearing impairments, vision impairments, and physical disabilities.	2005
Kernot Medal: RMITU engineering faculty award Best final year engineering student, across all disciplines at RMITU	1997
Double Degree Fifth Year Prize Best final year computer science and computer systems engineering student at RMITU	1997
ENGenius Display Award Best display at ENGenius engineering conference, Melbourne	1996
RS Components Award RMITU, excellence in electronic engineering design	1995
KRONE Australia Prize RMITU, excellence in communication engineering	1994

MEDIA APPEARANCES

- Contributions to animations for a dengue fever/mosquito story on ABC's "Catalyst", 2005
- Article in business and economy magazine "J@pan Inc", 2003
- Appearances on Japanese television news programs "You" and "News Station", 2003

INTERNATIONAL COLLABORATION

Working with CoolRock Software's CEO and sales team, located in USA.

Coordination of project management course running at JCU Singapore. On-site audit of JCU Singapore's IT lecturing.

Continued research with ATR International (Japan) while at JCU.

Arranged visits to JCU for researchers:

- Associate Professor Yoshio Matsumoto from Nara Institute of Science and Technology (Nara, Japan)
- Dr Gareth Loy from KTH Royal Institute of Technology (Stockholm, Sweden)
- Mr Luke Fletcher from the Australian National University (Canberra)
- Professor Yoshihito Takase from Tezukayama University (Nara, Japan)
- Mr Tsuyoshi Suenaga from Nara Institute of Science and Technology (Nara, Japan)

SELECTED RECENT PUBLICATIONS

Patent, and examples of journal publications, papers presented at international conferences, and popular articles:

- **Japanese Patent: 視線座標変換方法、そのプログラムおよびそれを記録した記録媒体 (Gaze coordinate transformation method)** by Chris Gaskett, 2002. Rights owned by Toyota Central Research and Development Laboratory
- **Hand-Eye Coordination through Endpoint Closed-Loop and Learned Endpoint Open-Loop Visual Servo Control** by C. Gaskett, A. Ude, and G. Cheng, G., *International Journal of Humanoid Robotics*, Vol 2, No 2, 2005
- **Is Optimal Foraging a Realistic Expectation in Orb-web Spiders?** by W. Edwards, P. A. Whytlaw, B. C. Congdon, and C. Gaskett, *Ecological Entomology*, Vol 34, 2009
- **That Elusive Veggie Airline Meal...** by Chris Gaskett, popular article for national newspaper *Masala Times*, Nov 2006

Please see <http://chris.gaskett.com/research/> for a complete list of formally published systems engineering/software publications and demonstration videos.

OTHER INTERESTS

Our baby girl arrived in August 2007, and she is a joy. I keep healthy through yoga, having moved on from inline hockey, soccer, and basketball. I've been a vegetarian since I was 10 years old. I grow vegetables and enjoy Asian/Indian/Middle Eastern cooking. I have a strong interest in classical literature—the Illiad, the Odyssey, and the comedies of Aristophanes (I'm impressed that a comedy can still work after 2000 years). I enjoy developing new skills and have found that there is little that I cannot learn; although I have had to abandon my pro-wrestling and comedy aspirations (a. not big enough; b. not funny enough).