

Postgraduate Supervision – Stephen MacDonell

The lists that follow should provide you with an indication of the sort of work I like to supervise, in terms of topic as well as method. In each case details of the degree, thesis title and student name are shown, as well as an indication of my specific supervisory role, and for those students who have completed their studies the abstract and full thesis can be downloaded from the link provided.

You should also carefully read the material provided by the University regarding enrolment for graduate studies – either at Master's or PhD level – including the important information regarding fees, and scholarships for study: <https://www.otago.ac.nz/postgraduate/researchqualifications/> The scholarships are highly competitive, but if you are a student with very good grades you will have a good chance of securing financial support for your studies.

Before you contact me you should read through all the information on my web page so that you are sure that we will work well together. If you have not read this material I am unlikely to reply. You might even choose to read one or two of my papers to get a feel for the research that I conduct! While many are available online I'd be happy to email any through to you if you indicate those of particular interest. Note also that, as part of the admission process, I will interview you, and I will ask you to prepare a draft research proposal, so that I can assess the extent of your commitment as well as your research interests.

I look forward to hearing from you!

Professor Stephen MacDonell

Student Supervision Record:

Doctoral (Completed):

26. PhD, Automated Digital Forensic Triage: Rapid Detection of Anti-Forensic Tools, Otago, T. Laurenson, 2017 (Role: Joint Supervisor. Co-supervisor: Assoc. Prof. H. Wolfe, Department of Information Science) [University of Otago Doctoral Scholarship Recipient] <http://hdl.handle.net/10523/7621>

25. PhD, The Strategic Behaviour of Health Workforce Actors: Implications for Health Workforce Planning and Forecasting, Otago, G. Rees, 2017 (Role: Secondary Supervisor. Primary Supervisor: Prof. R. Gauld, Department of Preventive and Social Medicine) [Health Workforce New Zealand Fellowship Recipient] <http://hdl.handle.net/10523/7511>

24. PhD, A Framework for Implementing Software Measurement Programs in Small and Medium Enterprises, Otago, A.A. Mughal, 2017 (Role: Primary Supervisor) [Otago Business School Dean's PhD Scholarship Recipient] <http://hdl.handle.net/10523/7468>

23. PhD, Learning to Program: The Development of Knowledge in Novice Programmers, AUT, N. Kasto Awbi, 2016 (Role: Secondary Supervisor. Primary Supervisor: Assoc. Prof. J. Whalley, School of Engineering, Computer and Mathematical Sciences) <http://hdl.handle.net/10292/10377>

22. PhD, Requirements Change Management in Global Software Development: A Multiple Case Study, AUT, W. Hussain, 2016 (Role: Joint Supervisor. Co-supervisors: Assoc. Prof. T. Clear and J. Buchan, School of Engineering, Computer and Mathematical Sciences) [AUT SCMS Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/10187>
21. PhD, Mobile Services and Applications: An Empirical Investigation from the Service Supply Perspective, AUT, K. Petrova, 2016 (Role: Primary Supervisor) [AUT Staff Member] <http://hdl.handle.net/10292/10107>
20. PhD, A Study on Software Testability and the Quality of Testing in Object-Oriented Systems, Otago, A. Tahir, 2016 (Role: Primary Supervisor) [Otago Business School Dean's PhD Scholarship] <http://hdl.handle.net/10523/6143>
19. PhD, Data Quality in Empirical Software Engineering: An Investigation of Time-Aware Models in Software Effort Estimation, Otago, M. Bosu, 2016 (Role: Primary Supervisor) [Ghana Government Scholarship/University of Otago Doctoral Scholarship Recipient] <http://hdl.handle.net/10523/6142>
18. PhD, A Multi-objective Architecture Reconstruction Approach, AUT, F. Schmidt, 2014 (Role: Primary Supervisor) [TEC BuildIT Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/8234>
17. PhD, Packaged Software Implementation Requirements Engineering by Small Software Enterprises: An Ethnographic Study, AUT, I. Jebreen, 2014 (Role: Joint Supervisor. Co-supervisor: Dr R. Wellington, School of Computer and Mathematical Sciences) <http://hdl.handle.net/10292/7162>
16. PhD, Collaboration Patterns of Successful Globally Distributed Agile Software Teams: The Role of Core Developers, AUT, S. Licorish, 2013 (Role: Primary Supervisor) [AUT Vice-Chancellor's Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/5973>
15. PhD, Open Source Software Development as a Complex System, AUT, J. Graves, 2013 (Role: Joint Supervisor. Co-supervisor: Assoc. Prof. T. Clear, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/5729>
14. PhD, Connectionist Methods for Data Analysis and Modelling of Human Motion in Sporting Activities, AUT, B. Bačić, 2013 (Role: Primary Supervisor) [AUT Staff Member] (Thesis under embargo until 2020) <http://hdl.handle.net/10292/5421>
13. PhD, Critical Success Factors in Multichannel Mobile Marketing: A Delphi Study, AUT, Yiwen Huang, 2013 (Role: Primary Supervisor) <http://hdl.handle.net/10292/5261>
12. PhD, Mentoring Practices in Information Systems Project Management, AUT, P. (Tuck Ming) Leong, 2012 (Role: Secondary Supervisor. Primary Supervisor: Prof. F. Tan, School of Business) [AUT CIRI Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/4175>
11. PhD, Evidence-based Software Engineering: Systematic Literature Review Process based on Visual Text Mining, USP Brazil, Katia Romero Felizardo, 2012 (Role: Secondary Supervisor. Primary Supervisor: Prof. José Carlos Maldonado, Institute of Mathematics and Computer Sciences, USP Brazil) <http://www.teses.usp.br/teses/disponiveis/55/55134/tde-18072012-102032/publico/Thesis.pdf>

10. PhD, An Ontology Driven Knowledge Discovery Framework for Dynamic Domains: Methodology, Tools and a Biomedical Case, AUT, P. Gottgroy, 2011 (Role: Joint Supervisor. Co-supervisor: Prof. N. Kasabov, KEDRI/School of Computing and Mathematical Sciences) [TEC Top Achiever Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/1239>
9. PhD, Understanding IS Development and Acquisition: A Process Approach, AUT, L. McLeod, 2009 (Role: Primary Supervisor) [TEC Top Achiever Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/644>
8. PhD, Supporting the Work of Global Virtual Teams: the Role of Technology-Use Mediation, AUT, T. Clear, 2009 (Role: Primary Supervisor) [AUT Staff Member] <http://hdl.handle.net/10292/650>
7. PhD, Information Technology Audit: Systems Alignment and Effectiveness, AUT, M. Nicho, 2009 (Role: Secondary Supervisor. Primary supervisor: Dr B. Cusack, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/646>
6. PhD, Contextual Information Retrieval from the WWW, AUT, D. Limbu, 2009 (Role: Secondary Supervisor. Primary Supervisor: Dr A. Connor, School of Computing and Mathematical Sciences) [AUT SERL Doctoral Scholarship Recipient] <http://hdl.handle.net/10292/450>
5. PhD, Implementation of Enterprise Systems: A Process View, Otago, T. Madhavan, 2008 (Role: Joint Supervisor. Co-supervisors: Prof. A. MacGregor and Dr P. Theivananthampillai, Department of Accountancy and Business Law) [University of Otago/University of Sydney Staff Member] <http://otago.lconz.ac.nz/vwebv/holdingsInfo?bibId=1545925>
4. PhD, Data Integration and Modelling in Bioinformatics, AUT, Liang Kee Goh, 2005 (Role: Secondary Supervisor. Primary Supervisor: Prof. N. Kasabov, KEDRI/School of Computer and Information Sciences) [TEC Top Achiever Doctoral Scholarship Recipient]
3. PhD, Automated Information Security Assurance, Otago, A. Rodgers, 2003 (Role: Secondary Supervisor. Primary Supervisor: Assoc. Prof. H. Wolfe, Department of Information Science)
2. PhD, Towards Business Excellence: Aligning Total Quality Management and Information Technology Management, Otago, M. Hassanin, 2002 (Role: Primary Supervisor) <http://hdl.handle.net/10523/1496>
1. PhD, Spatial Data Management in an Integrated Software Engineering Environment, Otago, S.K.S. Cockcroft, 1999 (Role: Primary Supervisor) [University of Otago Staff Member]

Masters (Completed):

21. MCIS (Hons.II(i)), Semi-automated Extraction of New Product Features from Online Reviews to Support Software Product Evolution, AUT, P. Volabouth, 2017 (Role: Secondary Supervisor. Primary Supervisor: J. Buchan, School of Engineering, Computer and Mathematical Sciences) [NZ ASEAN/MFAT Scholarship Award] <http://hdl.handle.net/10292/11026>
20. MCIS (Hons.II(i)), The Benefits and Challenges of Planning Poker in Software Development: Comparison Between Theory and Practice, AUT, Z. Zhang, 2017 (Role: Secondary Supervisor. Primary Supervisor: J. Buchan, School of Engineering, Computer and Mathematical Sciences) <http://hdl.handle.net/10292/10557>

19. MCIS (Hons.I), An Approach of Monitoring Backups and their Properties for a Vast Number of Heterogeneous Systems in a Business Cloud Computing Environment, AUT, A. Wendt, 2015 (Role: Secondary Supervisor. Primary Supervisor: K. Petrova, School of Computer and Mathematical Sciences) <http://hdl.handle.net/10292/8926>
18. MPhil (Hons.I), GeoComputational Methods for Surface and Field Data Interpolation, AUT, S. Zandi, 2014 (Role: Secondary Supervisor. Primary Supervisor: Prof. P. Sallis, GRC/School of Computer and Mathematical Sciences) <http://hdl.handle.net/10292/7155>
17. MCIS (Hons.I), Examining Expectations About User Involvement in Software Development and Factors That Influence High Quality User Involvement, AUT, A. Shinde, 2013 (Role: Secondary Supervisor. Primary Supervisor: J. Buchan, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/5662>
16. MCIS (Hons.I), ScrumCity: Synchronised Visualisation of Software Process and Product Artefacts, AUT, M. Alshakhouri, 2013 (Role: Primary Supervisor) <http://hdl.handle.net/10292/5595>
15. MCIS (Hons.II(i)), An Exploratory Study of Factors Influencing IT Project Initiation Decisions, AUT, Htike Htike Wut Yi, 2013 (Role: Primary Supervisor) <http://hdl.handle.net/10292/5337>
14. MCIS (Hons.I), Exploring M-Government Readiness: The Case of Vanuatu, AUT, W. Amos, 2012 (Role: Secondary Supervisor. Primary supervisor: K. Petrova, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/4621>
13. MCIS (Hons.II(i)), Self-organising Maps (SOMs) in Software Project Management, AUT, L. Dai, 2011 (Role: Joint Supervisor. Co-supervisor: J. Buchan, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/4516>
12. MCIS, Early Warning Signs in Software Projects, AUT, M. Kothari, 2011 (Role: Secondary Supervisor. Primary supervisor: Dr A. Connor, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/1327>
11. MCIS (Hons.I), User Directed Search Based Reverse Engineering, AUT, F. Schmidt, 2010 (Role: Joint Supervisor. Co-supervisor: Dr A. Connor, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/836>
10. MPhil (Hons.I), The Value and Validity of Software Effort Estimation Models built from a Multiple Organization Data Set, AUT, K. Deng, 2009 (Role: Primary Supervisor) <http://hdl.handle.net/10292/473>
9. MCIS (Hons.I), A Field Study of Domain Knowledge Sharing Practice in the Software Development Industry in New Zealand, AUT, C. Ekadharmawan, 2009 (Role: Secondary Supervisor. Primary supervisor: J. Buchan, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/461>
8. MInfoTech (Hons.I), Risk Management in Smaller Software Projects, AUT, D. Crosby, 2007 (Role: Primary Supervisor) <http://hdl.handle.net/10292/378>
7. MCIS (Hons.I), Tool Support for Social Risk Mitigation in Agile Projects, AUT, S. Licorish, 2007 (Role: Joint Supervisor. Co-supervisor: A. Philpott, School of Computing and Mathematical Sciences) <http://hdl.handle.net/10292/312>

6. MCIS, Usability in Whakapapa Systems, AUT, M. Gill, 2006 (Role: Secondary Supervisor. Primary supervisor: Dr P. Carter, School of Computer and Information Sciences)
5. MCIS (Hons.II(i)), Obtaining Business Benefits from IT: Factors that Influence the Adoption of Benefit Realisation Methodologies in New Zealand SMEs, AUT, S. Kodthuguli, 2005 (Role: Primary Supervisor) <http://hdl.handle.net/10292/12>
4. MA, A Software Metric Suite for Evaluating the Usability of Learning Management Systems, Otago, A. Sallis, 2005 (Role: Primary Supervisor) <http://hdl.handle.net/10523/1282>
3. MCom, Interactive Children: Desktop VR in the Classroom, Otago, K. Peterson, 2001 (Role: Primary Supervisor) [University of Otago Staff Member]
2. MCom, Factors that Influence Development Effort in Multimedia, Otago, T. Fletcher, 2000 (Role: Primary Supervisor)
1. MSc, Restructuring Information Systems for Process Reengineering Support, Otago, M. Danusantoso, 1998 (Role: Primary Supervisor)

Doctoral (In progress):

9. PhD, Software Visualisation to Support the Scrum Development Process, AUT, M. Alshakhouri, full-time, 2017 to present (Role: Primary Supervisor) [AUT Vice-Chancellor's Doctoral Scholarship Recipient]
8. PhD, Modelling and Formal Verification of Complex Cyber-Physical Systems for the Internet of Things, AUT, B. Dowdeswell, full-time, 2017 to present (Role: Secondary Supervisor. Primary Supervisor: Dr R. Sinha, School of Engineering, Computer and Mathematical Sciences) [AUT Vice-Chancellor's Doctoral Scholarship Recipient]
7. PhD, Achieving Effective Coordination in Distributed Agile Software Development, AUT, A.B.M.N.A. Talukder, full-time, 2016 to present (Role: Secondary Supervisor. Primary Supervisor: Dr M. Senapathi, School of Engineering, Computer and Mathematical Sciences) [AUT SECMS Doctoral Scholarship Recipient]
6. PhD, Effort Estimation and Scheduling in Agile Development, AUT, M. Tariq, full-time, 2016 to present (Role: Primary Supervisor.) [AUT SECMS Full Doctoral Scholarship Recipient]
5. PhD, Formal Methods for Requirements Engineering of Distributed Embedded Systems, AUT, A. Tanveer, full-time, 2016 to present (Role: Secondary Supervisor. Primary Supervisor: Dr R. Sinha, School of Engineering, Computer and Mathematical Sciences) [Faculty Mid-Career Award Scholarship Recipient]
4. PhD, Inter-organisational Systems Adoption in Airlines with the Context of Home-region Orientation: The Case of Passenger Service Systems, AUT, D.D.H. Lee, full-time, 2015 to present (Role: Primary Supervisor.) [School of Business Fee Waiver Recipient]
3. PhD, An Application for Mobility Tracking in Globally Distributed Teams, AUT, D. Zhang, full-time, 2013 to present (Role: Joint Supervisor. Co-supervisor: Assoc. Prof. T. Clear, School of Engineering, Computer and Mathematical Sciences)

2. PhD, A Transition Framework for Geographically Distributed Software Projects, AUT, B. Raza, full-time, 2012 to present (Role: Joint Supervisor. Co-supervisor: Assoc. Prof. T. Clear, School of Engineering, Computer and Mathematical Sciences) [AUT SCMS Doctoral Scholarship Recipient]

1. PhD, A Novel Multimedia User Interface for Handheld Console-Based Puzzle Games: A Play-Centric Approach, AUT, N.F. Zainal Abidin, full-time, 2009 to present (Role: Secondary Supervisor. Primary Supervisor: Dr R. Wellington, School of Engineering, Computer and Mathematical Sciences) [Malaysian Government Scholarship Recipient]

Masters (In progress):

2. MPhil, Leveraging Big Data Analytics in Travellers' Hotel Selection Preferences, AUT, X. Zhu, full-time, 2017 to present (Role: Primary Supervisor)

1. MHealSc, Barriers and Facilitators to the Adoption of Computerized Clinical Decision Support for Mild Traumatic Brain Injury and Pulmonary Embolism, Otago, S. Arnold, part-time, 2017 to present (Role: Secondary Supervisor. Primary Supervisor: Dr B. Woodford, Department of Information Science)