Thomas Alan Tilley

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Staff page (Payap): http://iit.payap.ac.th/?page_id=95
https://github.com/Tominator2

LinkedIn: https://au.linkedin.com/in/thomastilley

Citizenship: Australian



Evil Mad Scientist Labs were "...stunned at the brilliance of using Chupa Chups as engineering components" in my prize winning robot Lollybot. I am passionate about software development and teaching and my projects are most often found at the edge of where software and hardware meet.

ACHIEVEMENTS & QUALIFICATIONS

- Speaker at TEDx Chiang Mai, 2013
- Winner of the African Robotics Network (AFRON) \$10 Robot Design Challenge, 2012
- Member of the Australian Computer Society
- Australian Postgraduate Award Scholarship, 1999
- Griffith University Honours Scholarship, 1998
- Awarded the Australian Computer Society Prize for Computer Science, 1997
- Awarded the BankSA Prize for Computer Science, 1997
- Awarded the Sir Kerr Grant Memorial Prize, 1996
- Honorary Member of the S.A. Astronomical Society, 1996
- Member of the Golden Key National Honour Society

ACADEMIC HISTORY

- Promoted to **Assistant Professor**, May 2014.
- **PhD in Computer Science**, from the University of Queensland. Awarded 2004.
- Graduate Diploma of Arts, from the Bible College of Victoria. Completed 2005.
- Bachelor of Information Technology with First Class Honours, from Griffith University. Completed 1998.
- Bachelor of Science in Mathematical & Computer Science, from the University of Adelaide. Completed 1997.
- **Certificate in Digital Techniques**, from the Regency Institute of TAFE. Completed 1994.
- **Certificate in Radio Servicing**, from the Regency Institute of TAFE. Completed 1991.

RESEARCH

My research interests include Formal Concept Analysis (FCA), Formal Methods, Distributed Systems, Game controller hacking, and Software Engineering. My PhD explored the application of FCA to increase the usability of Formal Methods and my Honours work implemented a cross-platform Java/C⁺⁺ GUI framework enabling remote access to a spatial database management system. I have also worked as a research scientist at the Co-operative Research Centre for Enterprise Distributed Systems Technology.



EMPLOYMENT HISTORY

Apr. 2016 - Software Developer at Roster with ROSS

Present Cross-platform mobile application development.

Oct. 2007 - Lecturer at Payap University, Chiang Mai, Thailand

Dec. 2015

- Lecturing in undergraduate computing subjects including: Computer Graphics, Database Management Systems, Discrete Mathematics, Distributed Systems, Game Controller Hacking, Information Management, Mobile Development with Android, Multimedia Systems, Software Engineering, and Systems Analysis and Design.
- Supervising senior student internships, senior projects, and independent studies.

Mar. 2000 - Sessional Lecturer at Griffith University, Gold Coast, Australia

Nov. 2003

- Lecturing and tutoring coursework Masters and undergraduate students in Information Technology subjects including *Database Design* and *Introduction to Programming*.
- Tutoring coursework Masters students for *Internet Programming*, *Database Design* and undergraduate students in *Information Systems*.

May 2000 – Research Scientist at the Co-operative Research Centre for Enterprise Nov. 2000 – Distributed Systems Technology (DSTC)

Research and Java software development for the "Multi-Criteria Decision Making" project.

Sep. 2000 Contract Programmer for Zing Technologies

Java software development porting WebGrouputer/ZingThing for the Psion netBook, an early handheld computer running Symbian's EPOC operating system.

Jan. 1999 - Software Graduate with Boeing Australia Limited

May 1999 Java software development and hardware integration for the WebGrouputer/Zing-Thing communications groupware tool.

Nov. 1992 - Service Manager with Mitsubishi Electric Australia Pty Ltd

Jan. 1995

- Managing a service department and supervising a team of technicians.
- Workload scheduling for technicians.
- Setting/assessing productivity and time management goals.
- Processing payments and database maintenance.

Apr. 1992 - Customer Relations Co-ordinator with Mitsubishi Electric Australia Pty

Nov. 1992 Ltd

- Responsibility for handling difficult customers and resolving complaints.
- Service database report generation and data entry.

Mar. 1987 - Facsimile & Cellular Mobile Phone Technician with Mitsubishi Electric

Apr. 1992 Australia Pty Ltd & ABE Telecommunications (Fax) Pty Ltd

- Service and repair of facsimile machines and (AMPS) cellular mobile phones.
- Technical support and training for customers, sales staff and other technicians.

PUBLICATIONS

- 1. Lollybot: Where Candy, Gaming, and Educational Robotics Collide, T. Tilley, 2015 IEEE International Conference on Robotics and Automation (ICRA 2015) Developing Countries Forum, Seattle, U.S.A., May 29, 2015.
- 2. **Game Controller Hacking for Fun and Profit** (Best Research Paper Award), T. Tilley, *Proceedings of the Annual International Conference on Computer Science Education: Innovation and Technology (CSEIT 2010)*, pp.53-58, Research Publishing Services, 2010.
- 3. The Asian Mule in Cyberspace: Building Game Controllers from Locally Appropriate Materials, T. Tilley, *Proceedings of Computer Games, Multimedia & Allied Technology* (*CGAT'09*), pp.344-351, Research Publishing Services, 2009.
- 4. Citation Analysis using Formal Concept Analysis: A case study in Software Engineering, T. Tilley and P. Eklund, ACKE'07, 18th International Conference on Database and Expert Systems Applications (DEXA 2007), pp.545-550, IEEE press, 2007.
- 5. A survey of Formal Concept Analysis support for Software Engineering Activities, T. Tilley, R. Cole, P. Becker, and P. Eklund, *Formal Concept Analysis: Foundations and Applications*, LNCS. B. Ganter, G. Stumme and R. Wille (ed.s), LNAI3626, Springer-Verlag, 2005.
- 6. **Formal Concept Analysis used for software analysis and modelling**, W. Hesse and T. Tilley, *Formal Concept Analysis: Foundations and Applications*, LNCS. B. Ganter, G. Stumme and R. Wille (ed.s), LNAI3626, Springer-Verlag, 2005.
- 7. **Conceptual Exploration of Software Structure: A Collection of Examples,** R. Cole, T. Tilley, and J. Ducrou, *Proceedings of the CLA 2005 International Workshop on Concept Lattices and their Applications*, CEUR Workshop Proceedings, 2005.
- 8. **Formal Concept Analysis applications to Requirements Engineering and Design**, T. Tilley, School of Information Technology and Electrical Engineering, University of Queensland, *PhD Thesis*, December 2004.
- 9. **Tool Support for FCA**, T. Tilley, *Proceedings of the Second International Conference on Formal Concept Analysis, ICFCA 2004*. P. Eklund (ed), pp. 104-111, Springer-Verlag, 2004.
- 10. **Conceptual Analysis of Software Structure**, R. Cole and T. Tilley, *Proceedings of 15th International Conference on Software Engineering and Knowledge Engineering, SEKE'03*. pp. 726-733, Knowledge Systems Institute, July 2003.
- 11. **A Software Modelling Exercise using FCA**, T. Tilley, W. Hesse, and R. Duke, *Using Conceptual Structures: Contributions to ICCS 2003*. B. Ganter and A. de Moor (ed.s), pp. 213-226, Shaker Verlag, 2003.
- 12. **Towards an FCA based tool for Visualising Formal Specifications**, T. Tilley, *Using Conceptual Structures: Contributions to ICCS 2003*. B. Ganter and A. de Moor (ed.s), pp. 227-240, Shaker Verlag, 2003.
- 13. **Web-based Collaborative Multi-criteria Decision Making**, P. Deer, F. Modave, and T. Tilley, *Proceedings of IConIT'2001*, pp. 203-212, Thammasat University Press, Thailand, 2001.
- 14. **Swing Based remote GUI Emulation**, T. Tilley and P. Eklund, *Proceedings of Evolve 2000*, DSTC Pty Ltd, Brisbane, 2000.

- 15. **GUI Framework Communication via the WWW**, T. Tilley, and P. Eklund, *World Wide Web: Technologies and Applications for the New Millennium*, (ed) G.H. Young, pp. 297-302, Georgia: Computer Science Research, Education, and Applications Press, January 2000.
- 16. **Evaluating Distributed Graphical User Interface Communication**, T. Tilley, S. Pollitt, and P. Eklund, *Proceedings of AusWeb99*, *the Fifth Australian World Wide Web Conference*, Southern Cross University Press, Lismore, 1999.

ACADEMIC SERVICE

- Reviewer, Journal of Zhejiang University Science C (Computers & Electronics), Zhejiang University Press & Springer, 2011.
- Program Committee, Conceptual Structures: Knowledge Visualization and Reasoning: 16th International Conference on Conceptual Structures, ICCS 2008, July 2008.
- Reviewer, Conceptual Structures: Logical, Linguistic, and Computational Issues: 8th International Conference on Conceptual Structures, ICCS 2000, August 2000.

COMMUNITY & LEISURE INTERESTS

I enjoy listening to music, playing guitar, building things from PVC water pipe, arcade/video games, Godzilla movies, and science-fiction.

REFEREES

Assistant Professor Seung Hwan Kang (Head of Department)

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Payap University
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Amphur Muang
Chiang Mai, 50000 THAILAND
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