

Tristan Friedrich KLEINSCHMIDT

| | | | |
|-------------------------|---|---|--|
| NATIONALITY | Australian | | |
| DATE OF BIRTH | 30th of December 1983 | | |
| CONTACT INFORMATION | Unit 19, 44 Brisbane Street Toowong, QLD 4066 Australia | Phone: +61 7 3138 4769 Mob: +61 4 3978 6345 Email: kleinschmidt.tf@yahoo.com.au | |
| EDUCATION | Doctor of Philosophy (Elec Eng) <i>January 2006 – March 2010</i> Queensland University of Technology, Brisbane, Australia <ul style="list-style-type: none">• Dissertation Title: “<i>Robust Speech Recognition using Speech Enhancement</i>”• Supervisors: Professor Sridha Sridharan, Dr Michael Mason• Key Research Areas: Automotive Speech Recognition and Speech Enhancement Graduate Certificate in Research Commercialisation <i>March 2008 – June 2008</i> Queensland University of Technology, Brisbane, Australia Master of Engineering Science (Computer & Communications) <i>February 2005 – January 2006</i> Queensland University of Technology, Brisbane, Australia Bachelor of Engineering (Electrical & Computer) with First Class Honours <i>February 2002 – July 2005</i> Queensland University of Technology, Brisbane, Australia | | |
| PROFESSIONAL EXPERIENCE | Project Officer (Full Time) <i>January 2010 – Current</i> <i>Airports of the Future Project, Queensland University of Technology</i> The responsibilities and skills gained in this position include: <ul style="list-style-type: none">• Simulation of passenger flows within airport terminals using agent-based methodologies, including the expansion of models to include activities outside of the necessary formalities for boarding an aircraft.• Conceptual development of agent-based simulation frameworks in order to address a wide range of complex scenarios in airport terminals.• Modelling (and in particular simplification) of the complex nature of airport operations, providing a strong overview into the challenges of succeeding in this environment.• Development and analysis of airport process models describing passenger facilitation across all stakeholders in order to make recommendations to improve efficiency, security and passenger experience.• Analysis of the activities passengers actually undertake within the airport environment including airport retail.• Development of models capable of describing, monitoring and evaluating airport performance with respect to passenger facilitation.• Reasoning behind use of physical spaces required for current and future services within the airport, and how this might affect passenger facilitation efficiency and the passenger experience.• Project management including monitoring and evaluation of project milestones and deliverables, as well as providing research and infrastructure support for a research team of 30 personnel.• Preparation of progress and project reports to aviation industry partners, and key governmental agencies including the Australian Research Council.• Active interaction, liaison and negotiation with all project partners from the aviation industry, external investigators, and research facilities at both industry sites and partnered universities to ensure the ongoing success of the project.• Regular presentations to industry stakeholders outlining project progress and outcomes and advertise the project to the wider aviation community.• Participation at industry workshops focussing on future aviation environments within Australia.• Provision of high-level technical research oversight to the research directions of the project to ensure alignment with industry expectations.• Supervision of PhD students and provision of operational guidance to other research staff. | | |

OTHER EXPERIENCE Sessional Academic*March 2003 – May 2010**Faculty of Built Environment & Engineering, Queensland University of Technology*

Main subject material taught:

- Engineering software system design from problem analysis through to software development and testing.
- Programming in Matlab, C/C++.

PhD Candidate (Full Time)*January 2006 – March 2010**Speech and Audio Research Laboratory, Queensland University of Technology*

Key responsibilities and skill attained:

- In-depth review and detailed analysis of existing engineered systems through interpretation of technical documentation.
- Identification and development of creative engineering solutions to identified challenges.
- Effective time and project management skills to ensure on-time delivery of candidature milestones.
- Collection and validation of data for evaluation of system performance.
- Software system development and testing.
- Attendance at professional development workshops and courses on topics on public policy, commercialisation, leadership and entrepreneurship.

Research Assistant (as required)*January 2006 – December 2009**Speech and Audio Research Laboratory, Queensland University of Technology*

This work was conducted as part of a joint project between General Motors Holden, LaTrobe University and QUT as part of the Co-operative Research Centre for Advanced Automotive Technology (AutoCRC).

The responsibilities and particular work undertaken were:

- Demonstration to key stakeholders of proof-of-concept in-car speech system for navigation.
- Participation in industry workshops on future challenges in the Australian automotive industry.
- Proof-of-concept experimentation to validate the integration of previously independent sub-systems for improvement of overall system performance.
- Adaptation of speech recognition system to enable low-cost solutions.
- Compilation of work from full three year project into final project report.
- Preparation and submission of applications for future industry-based projects.

Visiting Research Scholar*April 2009 – July 2009**Center for Robust Speech Systems, University of Texas at Dallas, TX, USA*

The work undertaken involved:

- Statistical analysis of existing engineered systems in order to assess performance and to establish anomalies within the user group.
- Development of data collection and validation protocols to measure effects of adverse conditions on user behaviour with the system.

Technical Assistant (Part-Time & Vacation)*November 2002 – February 2005**Wide Bay Water Corporation, Hervey Bay*

Skills developed / responsibilities:

- Management of systems design.
- Interpretation of technical documentation, and understanding how individual components affect the overall system.
- Communication with residents of the local government area.
- Prioritisation of tasks to ensure on-time delivery of milestones.

HONOURS AND AWARDS

Australian Postgraduate Award Scholarship, 2006–2009.

Vice-Chancellors Postgraduate Scholarship, 2006–2009.

AutoCRC Postgraduate Scholarship, 2006–2009.

QUT University Medal, 2006.

SERVICE

Mentoring Coordinator – Built Environment & Engineering Dean's Scholars Alumni Group, 2006–Current.

COMPUTER SKILLS

- Applications: Office suite including Powerpoint, Excel and Access, productivity suites including Adobe Acrobat Pro and Adobe Contribute, Matlab.
- Operating Systems: Windows and UNIX/Linux.
- Programming Languages: C/C++, Perl, UNIX scripting, Visual Basic.
- Simulation environments: AnyLogic, Repast Symphony.

REFEREES

Professor Ashantha Goonetilleke

Professor and Industry Liaison – Airports of the Future
School of Urban Development
Faculty of Built Environment & Engineering
Queensland University of Technology
Phone: +61 7 3138 1539
Email: a.goonetilleke@qut.edu.au

Dr Michael Mason

Lecturer
School of Engineering Systems
Queensland University of Technology
Phone: +61 4 1049 5708
Email: m.mason@ieee.org

Mr Stephen Goodwin

General Manager – Operations
Brisbane Airport Corporation
Phone: +61 7 3406 3000
Email: stephen.goodwin@bne.com.au

Mr Matthew Cox

Manager – Passenger Analysis Unit
Australian Customs and Border Protection Service
Phone: +61 2 6275 6943
Email: matthew.cox@customs.gov.au