

Curriculum Vitae - Michael Robert Marner

Personal Information

Wearable Computer Lab
School of Computer & Information Science
University of South Australia

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Professional Experience

- 3/2008 - Current *Position:* Ph.D. Candidate
Employer: University of South Australia
- Experience Summary:* C++, OpenGL, network programming, development toolchain experience, 3D modelling and video editing, augmented reality research.
- Responsibilities / Achievements:* Development of Spatial Augmented Reality systems, conducting user evaluations, developing new user interface techniques.
- 10/2011 - 11/2011 *Position:* Instructor
Employer: Pearson Education
- Experience Summary:* Java programming demonstration
- Responsibilities / Achievements:* Production of additional demonstration videos to accompany H. Daniel Liang - Introduction to Java Programming, 9th Edition.
- 7/2011 - 10/2011 *Position:* Video System Developer
Employer: The Border Project
- Experience Summary:* C++ with OpenGL programming, working with many different disciplines involved in creating a theatre show
- Responsibilities / Achievements:* Development of a video projection system for the show *Half Real*. Included integrating with the Microsoft Kinect for tracking actors on set.
- 3/2005 - 6/2011 *Position:* Lecturer, tutor and practical supervisor
Employer: University of South Australia
- Experience Summary:* Public speaking, communication skills, teaching skills, administration work, program debugging in Java, C++ and OpenGL.
- Responsibilities / Achievements:* Teaching both large and small classes for the subjects: Computer Graphics, Java Programming, Operating Systems, Objects & Algorithms, and Foundations of Computing. Conducting lectures and tutorials. Marking of student examination papers, assignments and tests.

- 9/2010 - 10/2010 *Position:* AR Developer
 Employer: Country Arts SA
- Experience Summary:* C++, OpenGL, 3D modelling and video editing.
- Responsibilities / Achievements:* Development of interactive Spatial Augmented Reality components for Creative Development Project.
- 8/2008 - 10/2008 *Position:* Instructor
 Employer: Pearson Education
- Experience Summary:* Java programming demonstration
- Responsibilities / Achievements:* Production of demonstration videos to accompany H. Daniel Liang - Introduction to Java Programming, 8th Edition.
- 2006 - 2008 *Position:* Web Developer
 Employer: Loud Whisper Design
- Experience Summary:* PHP programming with MySQL databases, HTML and Javascript programming, problem solving, requirements analysis, and software design.
- Responsibilities / Achievements:* Communicating with clients to establish project scope and requirements. Designing and implementing PHP based solutions to web applications.

Education

- 3/2008 - Current Ph.D. - The University of South Australia
 Supervisors: Prof. Bruce H. Thomas and Dr. Christian Sandor
 Thesis topic: Interaction Techniques for Spatial Augmented Reality.
- 2003 - 2006 Bachelor of Information Technology (Computing & Multimedia) (Honours)
 The University of South Australia
 GPA: 6.28 (out of 7)
 Graduated with first class honours

Honours and Awards

ITEE Division Research Day - Best Student Presentation: 2011
 Australian Federal Government Postgraduate Research Award (APA)
 Undergraduate Scholarship for entry into a degree Program in Computer & Information Science
 Chancellor's Letters of Commendation: 2003, 2005
 Dean's Merit List: 2003, 2004, 2005
 University Merit Awards: 2006

Research Interests

Spatial Augmented Reality
 3D user interfaces
 HCI techniques
 Computer graphics.

Research Publications

- E. Maas, M.R. Marner, R.T. Smith, and B.H. Thomas, “Quimo: A Deformable Material to Support Freeform Modeling in Spatial Augmented Reality Environments,” *Poster Sessions: Proceedings of the IEEE Symposium on 3D User Interfaces*, Singapore, 2011.
- R.T. Smith, M.R. Marner, and B. Thomas, “Adaptive Color Marker for SAR Environments,” *Poster Sessions: Proceedings of the IEEE Symposium on 3D User Interfaces*, Singapore, 2011.
- R.T. Smith, M.R. Marner, and B. Thomas, “Adaptive Color Marker for SAR Environments,” *Demo Session: Proceedings of IEEE Conference on Virtual Reality*, Singapore, 2011.
- B.H. Thomas, G.S. Von Itzstein, R. Vernik, S.R. Porter, M.R. Marner, R.T. Smith, M. Broecker, and B. Close, “Spatial Augmented Reality Support for Design of Complex Physical Environments,” *Workshop on Interdisciplinary Approaches to Pervasive Computing Design*, 2011 (to appear).
- M.R. Marner and B.H. Thomas, “Augmented Foam Sculpting for Capturing 3D Models”, *IEEE Symposium on 3D User Interfaces*, 2010.
- C. Sandor et al., “Egocentric Space-Distorting Visualizations for Rapid Environment Exploration in Mobile Mixed Reality,” presented at the *IEEE Symposium on Virtual Reality*, Waltham Massachusetts, USA, 2010.
- S. R. Porter, M. R. Marner, R. T. Smith, J. E. Zucco, and B. H. Thomas, “Validating Spatial Augmented Reality for Interactive Rapid Prototyping,” in proceedings of the *9th IEEE International Symposium on Mixed and Augmented Reality*, 2010.
- M. R. Marner and B. H. Thomas, “Tool Virtualization and Spatial Augmented Reality,” *International Conference on Artificial Reality and Telexistence*, Adelaide, South Australia, 2010.
- S. R. Porter, M. R. Marner, R. T. Smith, J. E. Zucco, B. H. Thomas, and P. Schumacher, Spatial Augmented Reality for Interactive Rapid Prototyping, *International Conference on Artificial Reality and Telexistence*, Adelaide, South Australia, 2010.
- C. Sandor, A. Cunningham, U. Eck, D. Urquhart, G. Jarvis, A. Dey, S. Barbier, M.R. Marner, S. Rhee, “Egocentric Space-Distorting Visualizations for Rapid Environment Exploration in Mobile Mixed Reality”, *IEEE Symposium on Virtual Reality*, 2010.
- S. Porter, M.R. Marner, U. Eck, C. Sandor, B.H. Thomas, “Rundle Lantern in Miniature: Simulating Large Scale Non-Planar Displays”, *International Conference on Advances in Computer Entertainment Technology*, 2009.
- M.R. Marner, B.H. Thomas and C. Sandor, “Physical-Virtual Tools for Spatial Augmented Reality User Interfaces”, *International Symposium on Mixed and Augmented Reality*, 2009.
- C. Sandor, A. Cunningham, U. Eck, D. Urquhart, G. Jarvis, A. Dey, S. Barbier, M.R. Marner, S. Rhee, “Egocentric Space-Distorting Visualizations for Rapid Environment Exploration in Mobile Mixed Reality”, *International Symposium on Mixed and Augmented Reality*, 2009.

Skill Summary

Excellent problem solving skills
 Excellent interpersonal, communication, and public speaking skills
 Enthusiastic and hard working, fast learner
 Strong working knowledge of C++ and Java
 Knowledge of programming languages and technologies such as PHP, XML, HTML and SQL
 Experience with 3D modelling, animation, and rendering (Autodesk Maya)
 Knowledge of Windows and Linux operating systems

Extracurricular Activities

Sport Downhill Mountainbiking

Music	Play piano, drums and guitar
Volunteering	Volunteer for 3D Radio 03.7FM, community radio station in Adelaide, South Australia.

Referees

Available on request.