

Sara Falamaki
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Summary

Interested in full-time and contract positions in Software Engineering, Research and Development. Based in Sydney Australia.

Specialties:

- Programming: C/C++, C (.NET), Java, Python, SQL, Unix shell languages (zsh, bash, sh), assembler (MIPS, m68k), JavaScript/AJAX, php, Haskell, Prolog, VHDL
- Platforms: Linux (desktop, embedded), OS X, Windows, Solaris, FreeBSD
- Toolkits: QT, STL, OpenGL, VTK, ACE/TAO

Employment History

Research Software Engineer, CSIRO (March 2009-Present)

- Developed a cross-platform program for high resolution desktop sharing using C++ and QT, as part of the Braccetto immersive environments collaboration project.
- Set up developer tools (version control, wiki, bug-tracking) for the use of the NT Lab development team.

Software Engineer, Aspect Traffic (September 2007-December 2008)

- Developed systems enabling traffic enforcement tools to communicate and corroborate traffic events. Most development done using C++ on top of an ACE based framework.
- Designed database schema, and related SQL queries.
- Designed and implemented site monitoring system using Python and AJAX.

Software Engineer, TileFile (June 2006-August 2007)

- Developed the TileFile server in Python as part of a team of 4-10 Engineers.
- Designed and implemented the TileFile concurrency and data distribution model.
- Designed and implemented a media distribution model, so that media files can be spread across multiple CDNs.
- Designed and implemented an automatic API documenter and regression tester.
- Mentored new employees until they became familiar with the code-base and procedures.

Developer (S-Business), Citect, (July 2005-June 2006)

- Fixed bugs in various areas of Citect's industrial automation (HMI/SCADA) product, including the CitectSCADA kernel and device drivers, compiler, graphical configuration environment, alarm and trend subsystems.
- Analysed crash dumps correlating them with logs and configuration information to locate the root cause of defects.

- Developed tools to aid developers and support staff in locating and fixing defects and to improve processes.
- Wrote documentation in the form of knowledge base articles, help files, tutorials and technical reports for customers, support staff and other programmers.

University Computing Tutor, The School of Computer Science and Engineering, UNSW, (March 2002- July 2005)

- Delivered tutorials to classes of 15-20 students
- Tutored both the advanced and normal first year classes teaching Haskell and C.

Programmer/Sysadmin, Hitech Telecom, (December 2003-June 2004)

- Installed an SMS message system for customer support emails
- Programmed call-back and SMS functionality using Python
- Developed a support roster database and integrated it with the SMS system
- Installed Linux on various computers, running a variety of services.

Education

March 2001 – June 2005: Bachelor of Engineering in Computer Engineering (Honours), University of New South Wales

Awards

Anita Borg Women in Computing Prize

Recognising the outstanding achievements of a final year female student (undergraduate or post-graduate) in the School of Computer Science and Engineering, University of New South Wales.

Google Diversity Delegate at LCA 2009

Received a travel stipend and discounted registration to attend linux.conf.au in Hobart from Google.

Invited Speaker MSC Malaysia Open Source Conference

Was invited to present a talk titled "Onions and Spaghetti – Programming Lessons Learnt the Hard Way" at the developer track of the conference. Travel, accommodation and registration all paid for by the conference.

Notable Projects and Activities

Technical

- Honours Thesis: Simultaneous Localisation and Mapping using Stereo vision. Designed and wrote a system to process stereo data into a 3-Dimensional map of the camera's surrounds for use in autonomous navigation. (C++, Python)
- Simultaneous Localisation and mapping on a Pioneer robot using a Laser range finder. Built on the component based OCRA robotics framework. (C++)
- Software to assist developers tracking and fixing bugs. (C#, winforms)

- Web browser and FTP client (Java, Swing)
- Text editor with version control (C++, QT)
- Designing and maintaining the Women in Computing website and mailing lists (PHP, Shell Scripts)
- Giving technical talks about programming and tools for programmers at various geek gatherings.

Other

- UNSW Computing Society (CompSoc) President (2003).
- Various Women In Computing activities including “Build-Your-Own-Computer” day, Unix Workshops, programming classes for high school girls and primary school girls brainstorming workshops. I was also the co-organiser of the Linuxchix miniconference at Linux.conf.au in 2007.
- Director of the Women in Computing Group at UNSW (2002-2005)
- President and Founder of the UNSW Book Club (2002-2004), an online facility for borrowing books between members.

Interests

Computing: Programming, Systems, Gadgets, User interfaces

Other: Bushwalking and Cycling, Photography, Teaching

Referees

Available on request.