Harvey Ormston **harveyormston@me.com**

Creative and enthusiastic career level Hardware/Software Engineer and Manager with a strong appreciation of development and manufacturing integration life-cycles. Excellent systems and test engineering knowledge as well as proven leadership qualities. An innovator, who works well in a team environment but also a decision maker who can act autonomously. Accustomed to a very deadline driven environment, dealing face to face with customers at a technical level and regular travel as required by business needs.

Key Skills

- Software and hardware test development
- Programming (Python, C, C++, Matlab, bash)
- Digital Signal Processing (DSP) and Embedded Software (ARM Cortex-M, etc)
- Algorithm evaluation, Data Analysis and Audio Quality measurement
- Software development tools and processes (Jira, git, svn, Jenkins, pytest, make, Vagrant)
- Project / Team Management
- Mobile software platforms (iOS)
- Web stack (http, html/css, Apache/Tomcat, JMeter, Flask)
- Wireless communications protocols (BLE, GSM, C2K, WCDMA)
- Strong *nix CLI user/administrator

Career History

2011 – present: Dialog Semiconductor, Principal DSP Software Verification Engineer

Dialog Semiconductor creates energy-efficient, highly integrated, mixed-signal circuits optimised for personal portable, short-range wireless, lighting, display and automotive applications. At Dialog, I help lead the test activity for DSP Software and Hardware.

- Specify, plan and execute testing of DSP and Embedded Software.
- Develop software (in Python, C and C++) for the purpose of test automation.
- Perform analysis and characterisation of DSP algorithms such as Active Noise Cancellation (ANC), Dynamic Range Compression, Sensor Fusion, Asynchronous Sample Rate Conversion, EQ/Filtering and many others.
- Provide assessment of the quality (both subjective and objective) of algorithms and explore opportunities for improvement where necessary.
- Control Continuous Integration (using Jenkins) and Release of Software and Hardware deliverables.
- Perform system level test and hardware-based evaluation.
- Benchmark software against market competitor solutions and profile for performance (MIPS, memory footprint, power consumption, etc)
- Work with lab equipment including the Audio Precision APx series to perform audio quality measurements.
- Devise automated bench experiments using measurement hardware where required.

2004 – 2011: I-play / Oberon Media, QA Manager / Producer

I-play's primary business was the development and publishing of games for mobile handsets. At I-play, I was responsible for QA processes and project delivery across the global Reference development division, managing a team of up to 40 test engineers and leads in up to 6 different sites.

- Work with Production and R&D teams to test new technologies and product features.
- Identify requirements and opportunities for process improvement within the QA department and provide documentation and tools to assist project teams.
- Provide administrative and development support for all testing tools (bug database, TCM tools, build management, version control, automated test, etc).
- Plan, project manage and deploy QA resources across, on average, 6 concurrently running projects in various stages of development.
- Monitor test activity and provide technical or strategic judgements, assessing the impact of issues.
- Hire and train new testing staff. Lead on-going training and improvement of existing staff.

2000 – 2003: Agilent Technologies, New Product Systems Engineer / Product Engineer

I worked on the manufacturing team for Agilent's 8960 wireless communications test set. This product delivers test/laboratory development and protocol analysis solutions for digital and analogue cellular modulation formats.

- Test definition and development.
- System characterisation to ensure suitability for integration into Final Test environment.
- Development (definition of test methodology) and implementation (in software) of suitable qualification/production tests for RF Source hardware.
- Exhaustive parametric characterisation of Baseband RF Source hardware by programming complex, multi-variable measurement routines and experiments.
- Development of software tools and documentation to assist in production diagnostics.

Education and Qualifications

BEng (Hons) Electronics and Electrical Engineering, The University of Edinburgh (1996 – 2000)

Systems Engineering, Signal Processing, Systems Theory, Radio Frequency Engineering, Digital Communications, Circuit Theory, Microelectronic Devices, Electromagnetics, Product Studies, Power Electronics, Computer Science.

Activities & Interests

I enjoy programming in my spare time and am active in audio and games software development. I have a keen interest in music and run a small home-based recording studio. Other interests include reading, cinema and swimming. I have an intermediate knowledge of German.