

# JOEL STANLEY

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Adelaide, South Australia

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## Experience

- **IBM Linux Technology Centre**—Adelaide, South Australia  
*Senior Software Engineer: Jan 2014 - present*
  - Developed low level software as part of global team in the US, India, China and France
  - Power8 and Power9 firmware bringup on new server platforms for the OpenPower platform
  - Linux Kernel Architect for OpenBMC project
  - Ported Linux to a new ARM system on chip
  - Upstreaming Linux kernel changes in support of support new CPU architecture
- **Minelab Electronics**—Adelaide, South Australia  
*Software Design Engineer: Jan 2011 - Dec 2013*
  - Worked on embedded ARM platforms for consumer metal detector products. Specialised in the following areas
  - Signal processing development
  - Hatachi H8S (16-bit), Altera FPGA, Analog Devices Blackfin, Atmel SAM7 (ARM 7), ARM STM32F (Cortex M3)
  - USB device development on Windows, Linux and Android.
  - Linux bringup and boot time optimisation. testing infrastructure.
- **Chromium**—Adelaide, South Australia  
*Google Summer of Code Participant, Volunteer Software Engineer: 2009 - 2011*
  - Implemented features relating to the Linux/GTK version of the web browser.
  - Brought up the ARM Linux build on the OMAP3 based BeagleBoard.
  - Assisted in bring-up of 64-bit Linux build.
  - Instrumented power usage of browsers on the ARM Cortex-A8 processor.
- **Australian Semiconductor Design Company**—Adelaide, South Australia  
*Software Engineer: Sept 2007 - Feb 2010*
  - Worked on embedded systems simulators for cell phones.
  - Prototyped, implemented and maintained continuous integration and build systems.
- **One Laptop Per Child**—Cambridge, MA, USA  
*Google Summer of Code Participant, Internship: July - Sept 2007*
  - Detailed analysis of laptop power usage.
  - Hardware troubleshooting using C and Forth, and operation of oscilloscopes and logic analysers.

## Education

- **University of Adelaide**—Adelaide, South Australia  
*Bachelor of Electrical and Electronic Engineering (Computer Systems), Honours*
  - Achievements:
    - \* 2010 IET Student Papers Competition: Exploring Multi-Processor System on Chip Architectures, finalist.
    - \* Gained an internship at One Laptop Per Child, a project of the MIT Media Lab (Summer 2007).
    - \* Published paper "A MIPS R2000 Implementation", special section award at ISSCC, and Student Design competition at DAC.

## Skills

- **Systems experience:**
  - Linux kernel and systems (userland) programming.
  - PowerPC, ARM, x86, various embedded processors.
- **Programming:**
  - Proficient in C, Python, MATLAB,  $\LaTeX$ , UNIX Shells, Makefiles.
  - Experienced with many version control systems.
  - Familiar with Perl, Java, C++.

## Activities

- **Conference Talks:**
  - */sys/class/gpio/Parking Brake: Hacking my car* at linux.conf.au, Hobart, 2017.
  - *Tux in Space: High altitude ballooning* at linux.conf.au, Ballarat, 2012.
  - *Conference talk: "High Altitude Arduino: Project Horus* at linux.conf.au, Brisbane, 2011.

## References

- **Rusty Russell** *Engineer, Blockstream (Adelaide, Australia)*  
Former co-worker at IBM  
rusty@rustcorp.com.au - 61 413 662733
- **Timothy Ansell** *Software Engineer, Google (Sydney, Australia)*  
Former co-worker at Australian Semiconductor Technology Company  
tansell@google.com - 61 421 968221
- **Simon Loffler** *Digital Exhibitions Manager MOD, UniSA (Adelaide, Australia)*  
Collbarator at Hackerspace Adelaide  
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