Gareth Ferneyhough

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Education

University of Nevada, Reno

Reno, NV

Master of Science in Computer Science and Engineering

Fall 2012

- Course Work: Network Architectures and Economics, Excitable Cells Modeling, Human-Computer Interaction, Computer Vision, GPU Computing, Advanced Machine Intelligence Applications, Advanced Software Project Management and Development
- Thesis: Cognitive Models of Emotional Speech Processing and Music Perception

University of Nevada, Reno

Reno, NV

Bachelor of Science in Computer and Information Engineering

Fall 2010

- Senior Project: Real-time Audio Processing on Xilinx FPGA

Växjö University

Växjö, Sweden

Semester-long Study Abroad Program

Spring 2009

Experience

Brain Computation Lab, University of Nevada, Reno

Reno, NV

Graduate Research Assistant

Fall 2010 - Present

- Authored detailed, technical documentation for SBC products such as datasheets, user guides, and manuals
- Provided HW and SW support and improved documentation via feedback to reduce time spent on support
- Created programs to troubleshoot, rigorously test, and provide functionality for SBCs with embedded Linux
- Compiled and modified Linux kernel and drivers to add features and HW to both existing and new products
- Engineered and tested hardware components to insure accuracy and functionality for embedded designs

Brigham Young University - Idaho

Rexburg, ID

Student Computer Lab Administrator - Lead Tech

May 2008 - Apr. 2009

- Trained, coordinated, and guided a small team of students towards the completion of tasks involving all computer labs on campus
- Administrated 62 labs, 1,300+ computers, and 17 PXE Servers in a two domain environment; Utilized Altiris
 Deployment Console and scripting; Specialized in RHE Linux deployments
- Wrote concise installation and deployment instruction manuals and documentation for computer labs and 200+ software titles

Catch 80 Sports

Rexburg, ID

Network and Website Administrator

Nov. 2006 - Jun. 2007

- Implemented Windows based server with Linux based POS clients, reducing total cost of ownership
- Contributed essentially to the company in the production of an e-commerce website with company inventory
- Learned production of an entire e-commerce store in 1.5 months time with more than 2,800 products

Entrepreneurial Experience

Billings, MT

On Site Computer Tech Support

Jan. 2004 - May 2005

- Initiated a freelance computer tech support business which provided the community with affordable, on-site computer service, consultation, and training

Skills

Languages: C/C++, Assembly (x86), FPGA (Verilog HDL), MSDOS and Shell Scripting, LATEX, HTML, CSS

Computer and OS: Proficient in Debian & Red Hat Linux, Windows 9x, XP, Vista, Mac OS X; Virtualization of Windows & Linux guests using Sun VirtualBox, VMWare, and QEMU; In-depth H/W and S/W knowledge and troubleshooting techniques; OS installations (Dual & Triple Boot); BIOS & EFI setup; purchasing and building PCs

Software: MS Visual Studio; Xilinx ISE; AnalogDevices DSP++; Cadence OrCAD; MatLab; Eagle PCB; Office Suites

Projects: 4 and 8 bit RISC CPUs with ALUs, counters, registers, and 1K RAM; Stereo amplifier with I/O, bass, treble, and volume controls; Power supply basics; Parallel port game controller; Portable microphone amplifier; WAV music player; Simple calculator; Remote cell phone control (embedded system) for INL; Technologic Systems TS-WIFIBOX