# Gareth Ferneyhough

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#### Education

## University of Nevada, Reno

Reno, NV

Master of Science in Computer Science and Engineering - GPA 3.4

Fall 2012

- Course Work: Optimal Control and Reinforcement Learning for Systems with Dynamics, Advanced Software Project Management and Development, Human-Computer Interaction, Network Architectures and Economics, Computer Vision, GPU Parallel Computing, Excitable Cells Modeling
- 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 with graphical user interface

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

- Researched and implemented new emotional speech recognition techniques using Python, Matlab, C, and C++
- Implemented sound and video processing components and integrated them into virtual neurorobotics scenarios
- Assisted in authoring, editing, and reviewing journal and conference papers
- Became proficient in finding, compiling, and using a wide variety of software libraries under Linux
- Provided programming, computer, and moral support to other lab members

#### Advantage Computers

Reno, NV

Computer Technician

June 2009 - December 2010

- Repaired, built, and deployed computers and networks for home and business customers
- Nurtured and maintained professional business relationships with several clients
- Developed excellent laptop repair and soldering skills

## Reno Orthopaedic Clinic

Reno, NV

Computer Technician

September 2008 - June 2010

- Provided IT support to medium-sized health clinic (150 200 employees)
- Maintained Windows workstations, network infrastructure, and phone system
- Became familiar with Microsoft Server 2008, including Active Directory and Group Policy management
- $-\,$  Installed and configured a point of sale system for the company's new cafe
- Wrote several SQL scripts to automate cafe billing

## Skills

Languages: C/C++, Python, QT, CUDA, VHDL, LATEX

Computer and OS: Proficient developing and running software under Debian Linux and Windows; Experience developing parallel C++ applications using Open MPI; Some experience with embedded Linux development; User-interface design experience using QT; Strong Hardware and OS troubleshooting skills

Software: MS Visual Studio; Xilinx ISE; MatLab; Eagle PCB; Office Suites

Interests: Aviation and Aerospace Technology, History of Space Flight Technology, Cosmology, French Horn Performance, Snowboarding, Travel