# **Shaun Jackman**

EIT, BASc (First Class Hons.) Computer Eng.

## **Background**

I am a first class honours graduate in computer engineering, a computer and electronics enthusiast, an open-source software advocate, an avid traveller, a climber, a singer, and an experimental amateur chef. I am currently an Engineer in Training (EIT) with the Association of Professional Engineers and Geoscientists of B.C. (APEGBC). I have six years of industry experience developing embedded systems and programming real-time systems in C, C++, and assembly language. I have extensive experience developing software for Linux systems and using Linux-based development tools to design firmware for embedded systems.

## **Work Experience**

#### Pathway Connectivity Inc.

2004/2007 - Calgary, Alberta

Developed the firmware for Pathway's newest product line of small, low cost lighting control devices. This DIN-rail-mounted product line, which used Atmel's AVR microcontroller, converts between a variety of lighting-control protocols including DMX512, analog, PWM, and contact closure.

#### **Vortek Industries Ltd.**

2002-May/Aug - Vancouver, British Columbia - Co-op work experience

Worked on the rapid thermal processing tool used in the manufacturing of semiconductor devices. Developed the temperature sensor and lamp power control system using the QNX real-time operating system.

#### Pathway Connectivity Inc.

2000-Jan/Dec - Calgary, Alberta - Co-op work experience

Aided in modernizing the lighting control industry by working on the design of a novel piece of equipment, the Pathport, to adapt legacy lighting control equipment to Ethernet. This industry-changing product won an award for best new product that year at the industry trade show, Lighting Dimensions International.

#### **BC Place Stadium (BC Pavilion Corporation)**

1999-May/Aug – Vancouver, British Columbia – Co-op work experience Maintained the Novell NetWare WAN and office workstations at the BC Place Stadium site of this multi-site crown corporation.

## Knowledge

### **Programming languages**

C, C++, assembly language, Java, Perl, Python, and Matlab

#### **Logic synthesis**

Verilog and VHDL with Altera and Xilinx FPGAs and PLDs

#### **Network communication protocols**

Intimate knowledge of the TCP/IP protocol stack and Ethernet

## **Embedded hardware platforms**

ARM microprocessors and Atmel AVR microcontrollers

#### **Electronics**

Analog and digital electronics and prototyping

#### **Operating systems**

Linux and the QNX real-time operating system

#### **Project management**

Source code management and revision control

#### Education

#### BASc (First Class Hons.) Computer Eng., Simon Fraser University

1998/2004 - Burnaby, British Columbia

Scholarship student in Computer Engineering. Honours undergraduate thesis on the topic of using Ethernet in entertainment lighting-control systems. Completed two full years of co-op work experience at three companies. GPA 3.85.

#### French immersion, New Westminster Secondary School

1993/1998 - New Westminster, British Columbia

Completed senior Math and Calculus at age sixteen and continued studying mathematics at Simon Fraser University while still completing secondary-school education.

#### **Royal Conservatory of Music**

1990/1998 - New Westminster, British Columbia

Studied piano in private lessons and achieved my eighth grade certificate.

## **Volunteer Experience**

### The Debian Project

2002/present

Maintain a number of open-source software packages for the Debian distribution of GNU/Linux.

#### **Awards**

#### **Western Engineering Conference and Competition**

2002 – Gold medal in Explanatory Communications. Bronze medal in Entrepreneurial Design.

#### Simon Fraser University

1999/2004 – Open Undergraduate Scholarship

1998 – Tadeusz Specht Memorial Entrance Scholarship in Science

## **Contact Information**

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