# ric.buss.

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## education.

#### **Bachelor of Software Engineering**

University of Victoria Victoria, BC

## skills.

Programming Languages: Java, C, C++ (11, 17), Python (2.7, 3), SQL, PHP, JavaScript,

TypeScript, CSS, HTML, R, Matlab, Clojure, Lua, CoffeeScript, Pug (Jade), SASS, Assembly (AVR)

Sep 2014 – Present

Libraries: OpenGL, WebGL, three.js, React, Express, JQuery, Boost, Matplotlib, Numpy,

Codelgniter, JUnit, Mocha, Istanbul

Databases: MySQL, Oracle-SQL, MongoDB, Redis

**OS-Familiarity:** Windows, OS X, Linux (Ubuntu, openSUSE, Elementary)

Tools: Windows Office Suite, Photoshop, IDEs (Visual Studio, NetBeans, MySQL Workbench etc.),

Jira, Jenkins, Git, SVN

# projects.

#### **JavaScript**

- NPM library for checking duck types and other predicates in JavaScript
- Competitive Snake Al written in JavaScript as part of BattleSnake competition
- Team based problem solving at the Microsoft Coding Competition

#### 3D Programming in C++

- CPU based ray tracer with support for Phong and scatter shading
- Procedurally generated planets using OpenGL and simplex noise on the GPU

#### **Network Programming in C**

- Barebones webserver built with the C socket API
- A reliable datagram protocol built on top of UDP

#### **Web App Programming**

- SQL schema viewer and backwards engineering tool, supports static analysis of Java code
- Web application version of the board game Go
- Personal website using three.js for interactive graphics

## work.

### **Software Developer**

Sep 2016 – Feb 2017

Engineering Dean's Office, University of Alberta Edmonton, AB Responsibilities

- Designed a database schema for room booking software
- Worked on redesigning a database schema for graduate student's financial records
- Developed and maintained software for the Engineering intranet with regards to graduate student's financial records
- Developed software for Engineering intranet back end maintainability and functionality
- Provided software support for Professors and Administrators in the Dean's office

**Research Assistant** Jan 2016 – May 2016

Department of Mechanical Engineering, University of Alberta Edmonton, AB

Responsibilities

- Developed productivity software for a Professor of Mechanical Engineering
- Developed software to help promote open source research
- Developed software for the Mechanical Engineering Intranet with regards to Engineering Accreditation

## interests.

During my free time, I like to go indoor rock climbing with friends. If I am not on the wall chances are I am at home playing board games downtown or curled on up on the couch with a good video game. I love horror movies, science fiction, and anything science related!

## references.

#### **Contact Available Upon Request**

- Bob Koch
  - Former Employer Professor of Mechanical Engineering at the University of Alberta
- Mehran Panahi
  - Former Employer Software Engineer at the University of Alberta