Eric Buss

Website: ejrbuss.net
GitHub: github.com/ejrbuss
Email: root@ejrbuss.net

Education

Bachelor of Software Engineering   Sep 2014 – Graduating Aug 2019
University of Victoria
Victoria, BC

Skills

Programming Languages: C, C++ (11, 17), Objective-C, Python (2.7, 3), Rust, Java, Clojure, SQL, PHP, JavaScript, TypeScript, CoffeeScript, MATLAB, Lua, HTML, Pug (Jade), CSS, SASS, Less
Libraries: Matplotlib, Numpy, SciPy, TensorFlow, React, Express, JQuery, Boost, AVR Libc, OpenGL, WebGL, CodeIgniter, Mocha, Jest
Databases: MySQL, Oracle-SQL, MongoDB, Redis
OS-Familiarity: Windows, Mac OS, Linux (Ubuntu, openSUSE, Elementary, Fedora)
Tools: Windows Office Suite, Photoshop, Pixelmator Pro, IDEs (Visual Studio, NetBeans, MySQL Workbench etc.), Jira, Jenkins, Git, SVN

Open Source Projects

JavaScript
- Library for checking duck types and other predicates in JavaScript
- Multiple competitive snake AIs written in JavaScript as part of BattleSnake competition
- Team based problem solving at the Microsoft Coding Competition

3D Programming
- CPU based ray tracer with support for Phong and scatter shading
- Rust reimplementation of ray tracer with parallelism
- Procedurally generated planets using OpenGL and simplex noise on the GPU

C Programming
- Simple Lisp with mark and sweep garbage collection
- RTOS with a live trace visualization tool for AVR microprocessors
- Python based build tool for small C programs
- Barebones webserver built with the C socket API
- A reliable datagram protocol built on top of UDP

Web App Programming
- Personal website using React and Nextjs
- SQL schema viewer and backwards engineering tool, supports static analysis of Java code
- Dungeons & Dragons game management tool
- Web application version of the board game Go

Work

Mobile Application Co-op   Jan 2018 – Aug 2018
Ericsson, Kanata Site   Ottawa, MB
Responsibilities
- Developed and maintained an app for the iPad and worked to improve maintainability of legacy software
- Developed requirements for features on a large internationally distributed team
- Assisted and managed other developers in learning web technologies
- Developed a web app prototype using TypeScript, React, and .NET

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

I love movies, science fiction, and anything science or philosophy related! I fancy myself an amateur writer and enjoy creative endeavors, including drawing, playing instruments, and storytelling. I may not be great at all of these activities, but they have created fantastic memories. In my leisure time I love to sit down with friends for tabletop, go hiking, or hit the climbing wall.

References

Contact Information 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
- Gino Lord
  Former Employer – Software Designer for Wifi Mobility solutions at Ericsson