ENOCH TSANG

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enochtsang.com

Software developer passionate about futurizing humanity with production experience in embedded systems, web development, desktop applications, and server monitoring.

TECHNICAL SKILLS

Programming Languages	*Proficient in* C, C++, Golang, Python, Bash *Prior experience in* Assembly, C#, Ruby, Java, SQL, React
Frameworks and Major Libraries	Qt, Unity2D, OpenGL, GoogleTest, React, Vue, Node.js, FreeRTOS
Tools	Continuous Integration Systems - TeamCity, Bamboo, Jenkins, Travis CI Virtualization Platforms - VirtualBox, ESXi, Docker
Operating Systems	Windows, Mac OS X, Linux (Debian and Fedora based systems)

WORK EXPERIENCE

Circle Cardiovascular Imaging Inc.

Software Developer
January 2019 - Current

- Developed cardiovascular post-processing software for viewing and analyzing CMR and CCT images in an agile environment
- Took a leadership position as scrum master for a very experienced team tasked with migrating the core product from a desktop application to a web service
- Maintained and helped stabilize the core product for its 5.12 release
- Integrated the GoogleTest framework into the main product's codebase all the way from proposal to company-wide adoption
- Initiated and lead the migration from Surround to Bitbucket which has now been standardized across the whole company

Calgary Scientific Inc.

Professional Services Associate
May 2016 - May 2018

- Provided DevOps level support for the company's cloud-based medical image viewer product
- Lead development for a Managed Services offering written in Golang as a new product for the company
- Moved a GPU application into a docker container and revamped how demo kits in the company were created and managed

SEDS Research Lab

Research Assistant
Jan 2015 - Aug 2015

- Assisted a software engineering PhD student at the University of Calgary in research on a new algorithm on release patterns
- Studied and applied various statistical tests for comparing data
- Developed a tool in Python using PyQt to visualize and execute a new algorithm and perform various analysis on generated data

PROJECT EXPERIENCE

Student Organization for Aerospace Research

Software Lead
Sept 2017 - Aug 2018

- Managed all software for a 30 000 ft hybrid rocket that competed in the Spaceport America Cup 2018
- Introduced standard software practices such as version control, code reviews, and documentation that are still in practice
- Lead development for the avionics systems that were written in C using FreeRTOS responsible for, recovery initiation, data logging, telemetry, and engine control
- Lead development for the launch systems that were written in Golang and VueJS and were responsible for launch sequencing, automated oxidizer tank filling, oxidizer temperature regulation, and reporting
- *https://github.com/StudentOrganisationForAerospaceResearch*

University of Calgary Solar Car Team

Software
Technical Lead
Sept 2016 - Aug 2018

- Architected the software for the award winning 5th Generation Schulich Elysia Solar Car, relaying data all the way from embedded systems communicating via CAN to cloud accessible telemetry
- Built a software culture from the ground up that set a standard for version control, continuous integration, testing, and in-depth code reviews centered around mentorship
- *https://github.com/UCSolarCarTeam*

SpellBinder

Developer
June 2021 - Current

- Developed a typing game using Unity2D in a small team consisting of other developers, artists, voice actors, and writers

Wiener Takes All

Developer
Jan 2017 - April 2018

- Developed a 3D driving game rendered using OpenGL in C++ in a small team for the course CPSC 585 at the University of Calgary
- Lead development for the physics system that used Nvidia's open source PhysX library
- *https://github.com/WienerTakesAll/WienerTakesAll*

EDUCATION

Bachelor of Science in Software Engineering

Graduated
December 2018

Schulich School of Engineering, University of Calgary

HOBBIES

- Backpacking, Snowboarding, Video Games, Board Games, Volleyball, Bouldering