robertjctrl@gmail.com (737)465-9750 Los Angeles, CA

### **Education**

Bachelor of Science, Computer Science, University of Illinois at Chicago, GPA: 3.95

September 2016 - December 2018

Associate of Science, Computer Science, College of DuPage, GPA: 3.29

September 2013 - May 2016

### **Skills**

Programming Languages: C, C++, Python, Bash, TypeScript

Software Toolkits: ReactJS, Git, GDB, GCC/G++, Perf, Valgrind, WireShark, TCPDump, DPDK

## **Professional Experience**

### Software Engineer, Riot Games, Los Angeles, CA

October 2022 - April 2023

- · Assisted in the development of a C++ SDK used by several game teams and millions of players.
- Aided in the debug and development of a custom binary tracking tool for git written in Rust.
- Proactively created new channels of communication with vendors to build and strengthen relationships.

## Software Engineer, Twitch, San Francisco, CA

July 2021 - June 2022

- Created, refactored, and maintained Twitch Living Room with React, NextJS, and native platform tooling.
- Pioneered a DNS solution for local platform development improving developer velocity by 900x.
- Developed an Xbox One IPC scheme to pass native inputs from to and from a NextJS app.
- Delivered a cross-platform build initiative using WSL improving PlayStation development experience.

# Software Engineer, Trend Micro, Austin, TX

January 2019 - June 2021

- Architected, developed, and maintained multi-threaded software in C which assisted in streamlining FPGA chip integration and deployment for consuming R&D teams.
- Pioneered a CMake/CentOS build system which improved software development time by exposing TippingPoint source code in an industry standard format which became adopted and maintained by several R&D teams.
- Architected and Developed software testing schemes for proprietary FPGA chips enabling R&D teams to perform cost-benefit analysis which helped determine the effectiveness of the chip and ultimately the purchase and integration of said chips.
- Created and implemented a cost saving scaling method for AWS EC2 TippingPoint testing devices reducing hourly costs from \$0.308 to \$0.0376 unlocking Q&A teams to use 10x the number of systems for testing.
- Worked alongside a variety of R&D teams leveraging their processes to implement software written in C/C++/Python for FPGA debug and development which created a high degree team autonomy.

### Software Engineer Intern, Argonne National Lab, Darien, IL

January 2019 - June 2021

- Collaborated with a team of five to create and deploy Java service components which helped improve several lab operations.
- Created SQL queries for re-usable reports that clients used on a day-to-day basis to make data driven decisions.
- · Lead research group for modernization of frameworks resulting in adoption and creation of new standards and tools.

# Computational Biophysics Intern, Illinois Institute of Technology, Chicago, IL

June 2016 - August 2016

- Created Python programs to process simulation metadata enabling analysis and assessment of experiments.
- Developed Bash scripts to extract and process data from simulations allowing for abstraction and automation of workflow.
- Produced a supercomputer usage proposal that helped reduce project costs by thousands.

### **Sales Experience**

## Sales Associate, Eddie Bauer, Lombard, IL

October 2015 - January 2018

- Kept the store organized by following Eddie Bauer design guidelines which helped the company and store brand image.
- Maintained strong sales performance each quarter by having a UPT > 2.0 and SPH > 100.0.
- Provided excellent customer service that created and improved client relations.

# **Projects**

### **UT Inventors Program**

January 2020 - June 2021

- Mentored teams of 5-10 on cybersecurity projects.
- Co-lead winning inventors showcase team, 2020.
- Appointed sponsor liaison for Trend Micro.

## **Lua Resty Router**

May 2018 - August 2018

- Redesigned and improved existing WebSocket handler helping other developers to create scalable web services.
- Improved forked code clarity by introducing better variable names and methods objectively increasing readability.
- · Added middleware to easily handle Redis and PostgreSQL connections extending the framework beyond routing.