Robert J. Hickok

robertjctrl@gmail.com San Francisco, CA - USA (737) 465 - 9750

Education

Bachelor of Science, Computer Science, *University of Illinois at Chicago,* ***GPA****: 3.95* Sept. 2016 - Dec. 2018

Associate of Science, Computer Science, *College of DuPage,* ***GPA****: 3.29* Sept. 2013 - May 2016

Skills

Software & Computer Systems - C, C++, Python, x86, Bash, Networking (L3/L4), Applications

Tools & OS - Linux, Git, GDB, CMake, GCC/G++, Perf, Valgrind, WireShark, TCPDump, Data Plane Development Kit (DPDK)

Professional Experience

Software Engineer, *Twitch,* San Francisco, CA. Jul 2021 - Present

- Developing the next generation of Twitch - Living Room using React, NextJS, and native platform tooling.

Software Engineer, *Trend Micro,* Austin, TX. Jan 2019 - Jun 2021

- Architected, developed, and maintained high performance multi-threaded software written 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 which unlocked 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 allowed for team autonomy.

Software Engineering Intern, *Argonne National Laboratory,* Darien, IL. May 2017 - May 2018

- 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. Jun 2016 - Aug 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.

Web Administrator, *Evolution Artisan Confections,* Valparaiso, IN. Jul. 2014 - Sept. 2014

- Managed WordPress website and plugins which assisted business to grow from a startup to well-established local brand.
- Provided custom plugin and tooling support using PHP, JavaScript, and MySQL adding unique and engaging functionality.
- Implemented WordPress theme with custom modifications that established and maintained brand image.

Sales Experience

Sales Associate, *Eddie Bauer,* Lombard, IL. Oct. 2015 - Jan. 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 [https://inventors.cns.utexas.edu/projects] - Professional Jan 2020 - Jun 2021

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

Resty Router [www.github.com/arrjayh/lua-resty-route] - Personal (Lua) May 2018 - Aug 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.