Elliot Wasem

Software Engineer

Education

Bachelors of Science, Computer Science, Stevens Institute of Technology, *Hoboken, NJ GPA* -3.6

May, 2020

- Relevant courses: Algorithms, Data Structures, Database Management Systems, Agile Methods, Concurrent Programming, Operating Systems, Web Programming, Advanced Programming in UNIX, Compiler Design, Systems Administration
- Senior Design, Computer Science, first place: Along with my team, created machine learning computer vision model for a shipping solution by Zebra Technologies
- Upsilon Pi Epsilon, member: International Honor Society for the Computing and Information Disciplines

Skills

Programming: Java, C++, C, Python, Erlang, Rust, C#, .NET, Bash, JavaScript, Ocaml

Web & Cloud: AWS, GCloud, MySQL, Docker, HTML5, CSS

Misc. Tech: UNIX, Git, Linux, Windows, Trello, Emacs, LaTeX, VSCode, OOP

Experience

Software Engineer, WisEngineering, Picatinny Arsenal, Denville, NJ

Aug 2020 — Present

- Working on Android application in Java for US Military use
- o Implementing hundreds of cases of documentation and design work, using existing codebase as reference
- $\circ\,$ Reviewing code of peers, spot checking for correct implementation and design

Programming Tutor, Self Remote

Sept 2020 — Present

- Became proficcient at analyzing a problem, coming up with a viable solution, and implementing quickly
- Teaching students from across the country in Object-Oriented Programming, Operating Systems, Algorithms, among other topics

Software Engineer, DexGroup, Remote

June 2020 — Aug 2020

- o Designed and implemented human-computer interfaces for 5+ Amazon and Wayfair warehouses and facilities
- Allowed floor workers much clearer access to data by creating live visualizing warehouse systems using Ignition software
- Created visually comprehensive statistics to aid with system upkeep and utilization

Software Engineer, DexterityDB, Hoboken, NJ

Apr 2018 — May 2020

- Developed database storage engine which increased read speeds by up to 100x over InnoDB using Rust programming language
- Implemented a virtual filesystem which reduced file descriptor utilization from 1,000,000+ to 1
- Reduced continuous integration consts by 40% by designing and creating Linux server systems to run a custom continuous integration pipeline integration tools written in Bash, Python, and R to provide on-demand binaries and running statistics as development progressed
- Implemented testing scripts to accelerate generation of data, moving team from manual to automatic statistics generation
- Handled DevOps tasks relating to our server system, providing expertise where others lacked in-depth understanding

Teaching Assistant, Stevens Institute of Technology Hoboken, NJ

Aug 2018 — May 2020

- Assistant for courses Systems Programming, Algorithms, Concurrent Programming, Database Management Systems, Intro to Web Development
- o Created dozens of new assignments for 500+ students to nurture an understanding of the material

Undergraduate Research Assistant, Stevens Institute of Technology, Hoboken, NJ

Sep 2018 — Dec 2018

- Explored the possibility of extending eBPF from the network interfaces down to storage mediums to increase disk IO
- Setup and maintained Ubuntu servers both for the head professor and for other researchers

Projects

Zebra SmartPack, Senior Design, Stevens Institute of Tech. Hoboken, NJ (C++, Python, Bash) August 2019 — May 2020

- Worked together with senior design team over the course of 2 semesters
- Acted as systems administrator and development operations lead in support of software development subteams
- Created secure methods of connecting to an insecure system remotely
- Made possible the design and implementation of a machine learning model to identify and categorize types of shipping containers, using 2D and 3D computer vision technologies to generate information about shipping containers