

Objective

An experienced full stack software engineer who has experience architecting, designing, implementing, and maintaining small and large scale enterprise systems and leading these teams. I have graduate level experience in systems engineering and have been using Rust for a while. I am proficient in a number of programming languages including Rust, C, C++, Java, C#, NodeJS, React, and Go. I am familiar with AWS, Docker, and Kubernetes environments.

Professional Experience

Smartsheet

9/2019 - Present

Software Development Engineer II

Bellevue, WA

Grid Storage & History

- Architected, designed and implemented a very high visibility data migration tool while leading the team with development.
- Triaged, pinpointed, and resolved bugs relating to direct customer facing services.
- Migrated existing database solutions from on-prem locations to AWS.
- Architected and wrote features allowing users to encrypt their data using user-generated and owned keys.

Nordstrom

9/2017 - 9/2019

Engineer I-II

Seattle, WA

Product Details Page

- Lead a learning forum that includes several senior developers from many teams.
- Full Stack Developer using ReactJS, Go, and C# within AWS auto-scaling EC2.
- Architect and develop experiments and features for a high profile site.
- Rewrote the entire front end from the ground up with a massive inter-team push.
- Maintain a stable environment and provide support during holiday and anniversary sales.
- Develop highly scalable APIs that receive over 50k requests per minute.

Seattle Children's Hospital

1/2016 - 9/2017

Application Developer

Seattle, WA

Health Information Exchange

- Full Stack Developer using ReactJS, NodeJS, C#, Cache Objectscript, Bash, PHP, and Python.
- Architected and implemented 3 RESTful API's using ObjectScript and NodeJS (HapiJS).
- Implemented a lean microservice to ingest raw patient data and convert them to the FHIR standard then encrypt and store them while maintaining HIPAA compliance.
- Lead developer on two separate Proof of Concepts which caused an increase in core application performance.
- Managed our Atlassian suite of apps including Jira, Bitbucket, Bamboo, Confluence, and Fisheye.

Coding With Kids

3/2016 - 2/2017

Instructor

Redmond, WA

- Taught children from early elementary school through high school the art and science behind computer science.
- Taught children how to code with Scratch, Python, JavaScript, HTML, and CSS.

United States Army

7/2008 - 12/2012

Forward Observer / Team Leader

Fort Lewis, WA

- Assigned to the 75th Ranger Regiment and granted secret clearance due to sensitive duties required of a Ranger Forward Observer.
- Maintained positive control and accountability of over \$350,000 worth of equipment.
- Awarded the Joint Service Commendation Medal for controlling multiple aircraft which allowed for the success of countless special operations missions.
- Took charge of 25 to 30 personnel during exhaustive details which was instrumental for the logistics of ongoing special operations missions.

Projects

Evil Penguin

- Small game being written in Rust using Amethyst as the game engine.
- Next steps are to add computer difficulty including hopefully a ML learned hard mode.

Meta-Learning Friend-or-Foe Detection Via Q-Learning in Mixed-Agent Environments

- Extend Q-Learning to detect friendly agents from adversarial agents
- Using CounterFactual Regret Minimization as a comparison for state-of-the-art performance
- Using Reptile as the meta-learning algorithm to meta-learn the hyper-parameters

FEA-IM Evolutionary Machine Learning Research Implementation

- Used Rust to implement a research project that was focused on genetic algorithms, specifically Factored Evolutionary Algorithms and Island Models.
- Genetic Algorithms are slow so using Rust was an improvement to runtime performance over Python.

Feed-Forward Back-Propagation Neural Net

- Implementing a neural network in Rust.
- Depth agnostic and activation function agnostic.

Education

Johns Hopkins University - Whiting College of Engineering

May 2020

Master of Science in Computer Science

- Focus: Machine Learning

Oregon State University - College of Engineering

December 2015

Bachelor of Science in Computer Science

- Focus: Data Science