

Drew Halverson

262-327-7724 | drew.m.halverson@gmail.com | [linkedin.com/in/drew-halverson](https://www.linkedin.com/in/drew-halverson) | d-halverson.github.io

EXPERIENCE

Staff Software Engineer (L4)

July 2022 – Present

Palo Alto Networks

Santa Clara, CA (Remote)

- Created new reverse-proxy micro-service in Golang in order to improve scalability of existing Kubernetes micro-service by routing stateful API requests based on customer tenant; maintained correct cache mappings for request routing to optimize runtime by avoiding Neo4j database reads when possible
- Resolved customer-facing production bugs shortly after onboarding to new service exposed via gRPC that manages upgrades and downgrades of software versions for a networking agent installed on an organization's devices
- Implemented project that enables existing customer licensing infrastructure running on AWS Lambda to communicate licensing changes with separate Kubernetes micro-service via API requests; completed in two weeks while learning new code base (customer licensing) and re-learning Python and AWS (Lambda, API Gateway, RDS)
- Automated creation of new PubSub topics/subscriptions and BQ datasets/tables through use of GitLab CI/CD pipelines, lowering code verbosity and effort to create new PubSub or BQ items

Software Development Intern

June 2021 – August 2021

Amazon

Seattle, WA (Remote)

- Streamlined deployment of datasets used to inform delivery drivers on tasks such as locating a mailroom, unlocking a door with a code, or finding the correct unit of an apartment/condo complex
- Developed code on AWS Lambdas to monitor dataset deployment progress tracked in DynamoDB
- Leveraged AWS SQS to communicate dataset deployment completion events between Lambdas
- Marked the correct version of each dataset as "live" in AWS AppConfig for the delivery driver mobile app to use

Software Engineer Team Lead

October 2020 – April 2021

Trulight Project

Cedarburg, WI (Remote)

- Led a team of interns working on backend algorithm and API development; organized the team's work using Jira, prioritized critical tasks for release of first major version of backend
- Reduced TruLight safety score API runtime by ~25% by using concurrent APIs calls and refactoring existing code
- Added usage of JWT tokens to incoming API requests from TruLight mobile app for increased security

Software Engineer Intern

March 2020 – October 2020

Trulight Project

Cedarburg, WI (Remote)

- Created UML modeling diagrams for the first version of backend TruLight algorithm implemented by the team
- Developed an API hosted on GCP with Java Spring framework that retrieved data from sources such as United States Census, weather, and FBI APIs to calculate a TruLight safety score for the user's location

PROJECTS

File Backup Tools | *Java, Git*

January 2020 - August 2020

- File manager that uses a custom tree data structure traversed smartly by choosing which folder to look in next based on the file name that is being searched
- Support for deleting files in bulk that no longer exist on source drive or have a duplicate backup

Covid-19 Visualizer | *Java, JavaFX, Git*

April 2020 - May 2020

- Displays Covid-19 case data on a graph generated from user selection of country and time range from JavaFX GUI

TECHNICAL SKILLS

Languages: Golang, Java, Python, C/C++, SQL, JavaScript

Cloud Computing: **GCP** (PubSub, BigQuery, Kubernetes, Dataflow, App Engine, Datastore, Endpoints, Cloud Run, IAM), **AWS** (Lambda, DynamoDB, RDS, SQS, API Gateway, IAM, AppConfig), MongoDB, Neo4j

Frameworks: Swagger, Gorilla Mux, Go Testing, GoMock, Spring Boot, JUnit, Mockito, Python "unittest"

Other: Docker, JWT Tokens, gRPC, Http, WebSocket, Protobuf, Git, GitLab, GitHub, Jira, Asana, Postman, Lightstep, VS Code, IntelliJ, Vim, Linux, Grafana (Observability Dashboards, Alerting)

EDUCATION

University of Wisconsin - Madison

September 2019 – May 2022

Bachelor of Science in Computer Science – GPA: 3.67

University of St. Thomas

September 2018 – May 2019