# Drew Halverson

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#### EXPERIENCE

## Staff Software Engineer

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 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)

- $\bullet \ \ {\rm Created} \ \ {\rm UML} \ \ {\rm modeling} \ \ {\rm diagrams} \ \ {\rm for} \ \ {\rm the} \ \ {\rm first} \ \ {\rm version} \ \ {\rm of} \ \ {\rm backend} \ \ {\rm TruLight} \ \ {\rm algorithm} \ \ {\rm implemented} \ \ {\rm by} \ \ {\rm the} \ \ {\rm team}$
- 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, HTML/CSS

Frameworks: Spring, Swagger, JUnit, Mockito, Go Testing, Python "unittest"

GCP: PubSub, BigQuery, Kubernetes, Dataflow, App Engine, Datastore, Endpoints, Cloud Run, IAM

AWS: Lambda, DynamoDB, RDS, SQS, API Gateway, IAM, AppConfig

Developer Tools: Git, GitLab, GitHub, VS Code, IntelliJ, Vim, Linux, Jira, Postman

# **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