







ThePenguinCo

# **Technical Skills**

- Languages: Java, Python, Go, C++, SQL, JavaScript, TypeScript, HTML, CSS
- Libraries and Frameworks: React|S, Node|S, Spring, Mockito
- Tools: AWS, Kubernetes, Docker, Snowflake, MySQL, MongoDB, Bash, Git, Jenkins, Terraform, Linux

# **Experience**

#### **Software Engineering Intern**

May 2020 - Nov 2020

#### Lacework Inc. | Remote

- Implemented database optimizations including materialized views and marker tables for security vulnerability data to reduce expensive queries, saving the company an estimated \$1.5M per year
- Designed queue abstractions for a distributed scalable job scheduler in Go to enable horizontal scaling and report the internal state and job statistics of individual scheduler instances
- Created a high-performance concurrent queue loader microservice that processes messages from SQS queues and loads JSON file data from Amazon S3 into Snowflake databases

**Founder** Dec 2019 – Apr 2020

#### Hyperdoc Inc. | Sunnyvale, CA

- Founded a Y Combinator (W20 batch alumni) backed developer tool startup that helps software teams and open source project contributors create better documentation and onboarding materials
- Engineered the backend server in Python (Flask) and wrote a VS Code extension in TypeScript

#### **Software Engineering Intern**

Sep 2019 - Dec 2019

#### Lacework Inc. | Mountain View, CA

- Created a UI tool in Java to compare cloud security datasets via data visualization models and graphs
- Engineered an extensible API based testing framework in Java to schedule and run tests for data pipeline microservices, utilizing Docker and Kubernetes
- Devised an algorithm to resolve function dependencies for a custom query language translator

#### **Software Developer Intern**

Jan 2019 – Apr 2019

#### Nuance Communications | Montreal, QC

- Implemented bug fixes and new features in a virtual assistant editor stack made with Java Spring
- Built unit tests using Mockito in a test-driven development environment to improve code quality
- Constructed Jenkins/GitLab pipelines to schedule builds and execute unit tests and source code scans

# **Projects**

Ping Lite Apr 2020

Created UNIX ping utilities in Go and C++ that sends ICMP echo requests with IPV4 and IPV6 support

#### Options Calculator Mar 2020

• Developed an options pricing estimate calculator using Black-Scholes model approximation in Python and designed a web application in ReactJS to show the data

### Hear My Prof | McHacks 6

Feb 2019

• Created an English speech to text transcription app for Android in Kotlin, leveraging the Google Cloud Platform API; won first place out of 150+ teams for the best educational application

# **Education**

## **University of Waterloo**

2018 - 2022 (Expected)

Honors Bachelor of Applied Science (Computer Engineering) Co-op

GPA: 3.9

Relevant Coursework: Data Structures and Algorithms, Numerical Methods, Linear Algebra, Advanced Probability