# **Gary Frederick**

Backend | Security Engineer

Make School Bachelor's degree - March 2021

University of California Berkeley Associate Degree - March 2018

#### **Experience**

Paysplit | Backend Engineer April 2020 - Present PAYSPLIT

Responsibilities:

- Design api end-points and database schema.
- Utilize backend technologies such as: Typescript, Docker, AWS(EC2, Cognito), Swagger Docs
- Write route and unit tests

Officengine | Software Engineer Feburary 2018 - March 2019 OFFICENGINE

Responsibilities:

- Automated manual services decreasing expense cost by 20%.
- Interpreted data, analyzing results using statistical techniques
- Create and maintain optimal data pipeline architecture

Salesforce | Data Analyst Intern Feburary 2018 - March 2019 SALESFORCE

Responsibilities:

- Built and tested statistical models, such as classification algorithms, t o evaluate customer behavior.
- Improved software to optimize performance, usability, and research re producibility by 50%.
- Work closely with others on the Salesforce Data Analytics team, as w ell as cross- functionally with product, marketing, engineering, and busin ess teams.

# **Projects**

The following is a summary of my open source projects and learning. For details, please click the link to view the document

GOLANG

- goclone Utilizes powerful Go routines to clone websites to your computer within seconds.
- gostream Golang realtime streaming API
- scdl A CLI tool utilizing a go routine pool ensuring multiple thread safe and fast downloads from SoundCloud within seconds.
- nfc This is a Go wrapper for the Libnfc. Libnfc is a library which allows userspace application access to NFC devices.

**PYTHON** 

- blacklister A radix tree implementation of a IPv4/IPv6 blacklisting application
- tweetGen Generates sentences that are calculated via a stochastic model describing a sequence of possible events in which the probability of each event depends only on the state attained in the previous event (Markov Chain) and are then tweeted.

# Skills

#### Web

- Advanced knowledge of: Javascript, Node.js, Typescript
- Proficient knowledge of: CSS, SCSS (webpage reconstruction)
- Proficiency in front-end frameworks: React, Vue, Angular

#### Python

Mastered the basic grammar and Python standard library.

Advanced knowledge in frameworks: Django, Flask

#### Golang

Mastered the basic grammar and Golang standard library.

Advanced knowledge in frameworks: Echo, Gin

### C | C++

Used C/C++ to develop large complex applications, advanced knowledg e of principles and rich experience in ecological technology stack.

- CGo
- Cython

# Security

Advanced understanding of networks and routing, and software exploitati on.

- CCNA (Security)
- TCP/IP Protocol Suite
- Wireshark
- NMAP

## Database

Proficiency of basic concepts of relational databases, and understand da tabase performance optimization methods.

- MYSQL
- PostgreSQL
- MongoDB
- Redis

# Dev Ops

Advanced knowledge of systems development life cycles and services.

- Docker
- AWS
- Kubernetes
- Caprover
- Heroku