Michael Elias

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EXPERIENCE

Backend Software Engineer
Athos - Platform Team

Sept - Dec 2019
Redwood City, CA

- Designed and implemented RESTful API's AWS S3 using Python Flask and MySQL RDS deployed on AWS
- Developed an automated testing process to improve rate of iteration and release by 300%
- Took on leadership roll in ownership and development of business API's, working closely with multi-functional teams to lead weekly production releases in an Agile environment

Security Developer
ISARA Corporation - Integration Team

Jan - May 2019
Waterloo, ON

- Designed and implemented a platform independent build cycle for ISARA's quantum-safe OpenSSL connector using Jenkins, CMake, and Python
- Dockerized tests and customer demos for ISARA's quantum-safe OpenSSL connector

Software Engineer
Nuance Communications - Development Team

Sept - Dec 2017, May - Aug 2018
Waterloo, ON

- Developed and designed print management software, creating RESTful API's and internal communication protocols
- Used Chef automation alongside Ruby and PowerShell scripting to automate the creation and implementation of internal servers and virtual machines

PERSONAL PROJECTS

TopShelf (MySQL, Python Flask, Alembic/SQL-Alchemy, AWS)
Used Alembic/SQL-Alchemy to design and programatically implement MySQL schema. Created RESTful API's in a single responsibility micro-service architecture using Python Flask. Deployed the above on AWS, utilizing Amazon Cognito for user authentication. Consumed these API's in an Android app.

Smart Dots (Python)
Developed an application where a population with randomly generated paths learn to reach their goal using a genetic algorithm and random mutation.

Voice Recognition Application (C# .NET)
Created voice recognition application to control personal computer through speech.

SKILLS

Languages:
Python, C++, C#, C, JavaScript, PowerShell, HTML, CSS

Frameworks & Libraries:
Flask, NodeJS, Express, Angular, Material, PyTest, Alembic, SQL-Alchemy

Databases:
Google Datastore, MySQL, DynamoDB

Tools:
Git, Jenkins, Docker, Chef Automation, Google Cloud Platform (GCP), Amazon Web Services (AWS)

EDUCATION

University of Waterloo
3B - Systems Design Engineering
Graduating April 2021

COURSEWORK

Digital Systems
Digital Computation
Data Structures & Algorithms
Machine Intelligence
Object-Oriented Programming
AWS Practitioners Crash Course

INTERESTS

Finance/Investing

Craft Cocktail Enthusiast

Percussion, Piano, Bass

Hockey, football, rugby, curling, ultimate frisbee, water skiing

Interior camping, hiking