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EXPERIENCE

APPIAN

SOFTWARE ENGINEER II

OCT 2024 – PRESENT

- Leveraged **Python**, **SQL**, and **GitLab CI/CD** to create a pipeline to release software patches. Incorporated request submissions; departmental approvals; **real-time** patch status tracking; **automated build**, release, and **regression testing**; and **audit infrastructure**. **Reduced patch process time** by approximately **25%**.
- Utilized **Python**, **Terraform**, and **AWS (Lambda, CloudWatch Metrics/Alarms, SNS)** to implement an automated error reporting mechanism for **team-critical AWS Lambda** function failures. **Reduced incident response time** by **23%**.
- Employed **Python**, **Bash**, and **Gitlab CI/CD** to **dynamically generate artifacts** in the hotfix documentation generation pipeline, completely eliminating manual toil and **reducing hotfix documentation generation time** by about **20%**.
- Optimized execution time of **team-critical AWS Lambda** function interacting with a **PostgreSQL** database by **offloading 60% of computations** to a user-defined function on the database server.
- Created, tested, and implemented **3 PyPI packages** for internal use, **hosted on a private GitLab instance**. Reduced code duplication in **5** different team repositories.

SOFTWARE ENGINEER I

JUN 2023 – OCT 2024

- Applied **Python**, **Bash**, **Terraform**, **AWS (Lambda, Cloudwatch, S3, IAM, Translate)**, and **GitLab CI/CD** to architect and create the infrastructure that internationalizes the entire Appian platform. Achieved a **99% reduction** in translation **cost** and **time**, an **85% decrease** in **missing translations**, and maintained a **92% accuracy** compared to human translation services.
- Developed **4 ETL pipelines** with **Python**, **Bash**, **SQL**, **Terraform**, and **AWS (Lambda, Cloudwatch, RDS, DynamoDB, IAM, S3)** to populate a **PostgreSQL** database daily, powering **Grafana** dashboards for visualizing software release metadata, test results, hotfix downloads, and i18n coverage.
- Designed and tested **7 internal REST APIs** for use in **ETL and CI/CD pipelines**, using **Python** and **AWS (Lambda, Cloudwatch, DynamoDB, IAM)**.
- Redesigning the software release pipeline to use the Builder design paradigm (in **Python**) in order to dynamically generate the **YAML** files for **GitLab CI/CD**, **reducing code duplication** by **15%** and improving modularity and maintainability.

PROJECTS

STREAMIXER: A MUSIC STREAMING & MIXING APP

SOLO DEVELOPER

DEC 2024 – PRESENT

- Using **AWS**, **Terraform**, **Python**, and **SQL** to create a music streaming app that also allows users to create mixes and transitions with customizable track entry points, exit points, and crossfade durations.
- Plan to implement a beat-matching algorithm to auto-queue tracks.

EDUCATION

THE UNIVERSITY OF TEXAS AT AUSTIN

M.S. IN COMPUTER SCIENCE

Jan 2024 - Dec 2026

GPA: 3.8 / 4.0

GEORGE MASON UNIVERSITY

B.S. IN COMPUTER SCIENCE

Aug 2019 - May 2023

GPA: 4.0 / 4.0

TECHNICAL SKILLS

LANGUAGES

5+ years: **Python**

4+ years: **SQL** • **Java** • **C**

1+ years: **Bash** • **C++** • **Go** • **Rust** • **JavaScript**

TOOLS & TECHNOLOGY

AWS (Lambda, Cloudwatch, S3, EC2, RDS, DynamoDB, SNS, SQS, EventBridge, IAM) •

Terraform (IaC) • **Docker** • **Linux** • **Git** •

MySQL • **PostgreSQL** • **NoSQL** (MongoDB, Elasticsearch, Firebase) • **OpenSearch** •

GitLab CI/CD • **Grafana** • **Android Studio** •

GraphQL • **CUDA**

PERSONAL INTERESTS

PROGRAMMING

My enthusiasm for programming comes from deep curiosity, creativity, and a keen attention to detail. I love tinkering to learn how things work. Devising and executing solutions to real-world problems is deeply rewarding for me.

DJ-ING

My passion for creativity also extends to music, where I love to explore how melodies connect. I began learning about audio and DJing software driven by the belief that a DJ should guide listeners on a unique musical journey. To make this possible, I am developing software that simplifies DJing, allowing anyone to create personalized, seamless mixes without complex tools.

BARBERING

Ever since I learned to cut my own hair, I have found barbering to be another way that I can express my creativity and attention to detail. In addition to myself, I give free haircuts to friends and those who may not be able to afford current barbershop prices. For me, barbering is not a business venture, but a fulfilling hobby and an additional form of artistic expression.