developer with backgrounds in API & UI development, microservices, databases, fuzzing, NLP & ML, event-driven programming, and cloud-native & bare-metal multi-tenant systems

SKILLS

- Languages + Frameworks: Python, JavaScript, Go, Haskell, C++, SQLAlchemy, Flask, Django, React
- Infra: AWS/GCP/Azure, Postgres, MySQL, Redis, Rabbit, Docker, Kubernetes, Linux, Terraform

EXPERIENCE

Software Engineer II - Mobile @ Klaviyo

May 2022 - March 2023

Worked on various projects and features to provide a scalable and performant SMS-sending experience necessary to ensure client messages get sent through the right channel and delivered via the right platform at the right time.

- Implement monitoring and alerting systems for various features like virtual contact cards and webhooks using Grafana, Graphite, and StatsD to improve observability during high traffic periods and ensure uninterrupted service during Django cutovers and providing a seamless user experience with minimal downtime
- Maintain a customizable account information report generator & visualizer built using dtale, Django, & MySQL
- Contribute to the development of an in-app bell notification feature using Django and React to proactively inform customers about canceled SMS campaigns

Software Engineer - Platform @ ForAllSecure

March 2021 - May 2022

Worked independently and as part of short-term & rapidly evolving teams to bring Mayhem - a fully autonomous cybersecurity system - to market. Responsibilities included but were not limited to designing, building, and maintaining various services and features, such as GitHub OAuth and sharable badges, aimed at enabling easy integration into existing CI/CD pipelines and shortening customer onboarding journeys.

- Integrate third-party APIs such as GitHub OAuth & Keycloak to simplify authentication in CI/CD workflows
- Optimized queries associated with defect reporting endpoints to decrease page load times by 7.12%
- Built a reporting dashboard using Postgres, SQLAlchemy & React (reCharts) to provide easily consumable usage insights and increase engagement with non-developer users of the Mayhem platform
- Actively improved internal testing infrastructure using pytest fixtures to increase reusability & test coverage by 8%

Junior Engineer - Backend @ Pivony

May 2020 - October 2020

Architected a distributed AWS native topic modeling platform to process and summarize textual data, identify trends such as sentiment, common complaints, influential documents, most frequent keywords, and deliver actionable insights.

- Built a preprocessing microservice using SQLAlchemy, Docker, and Dask to provide multilingual sentiment analysis, text tokenization, & keyword extraction; optimized the service using multithreading, resulting in a 55% reduction in billable EC2 instance hours
- Created an AWS resource orchestrator using boto3, SQLAlchemy, and Postgres to optimize resource allocation and eliminate idle EC2 instances
- Researched and developed a topic modeling engine utilizing BERT and various unsupervised algorithms such as LDA & GSDMM to cluster text into human-readable topics at scale
- Designed and implemented a RESTful API to provide a universal gateway to various microservices using nginx, Flask, SQLAlchemy, and AWS RDS

EDUCATION

Computer Science, BA, Reed College

August 2015 - January 2020

• Thesis : Scalable Learning for the Odd-Man-Out Task with Applications to Word Vector Induction

Informatics, Exchange, University of Sussex

August 2017 - June 2018

PROJECTS

<u>sirch</u> June 2022 - Present

• parse static Markdown files & extract metadata such as keywords, tags, and summaries using natural language processing to generate a low-bandwidth searchable static site