Abenezer M. Mamo

Full Stack Developer

hi@abenezer.sh - https://github.com/a6enez3r - https://abenezer.sh

Technical Skills

Languages/Frameworks: python, go, Haskell, JavaScript, Flask, Gin, React/Redux, Celery, SQLAlchemy
Infra/Ops: AWS, GCP, Azure, Postgres, MongoDB, Redis, Docker, Kubernetes, Linux, Git, Jira, Hive

Work Experience

ForAllSecure **Mar 2021 – Present**
Software Engineer Remote

Designed, built, and maintained various services and features necessary to bring Mayhem—a fully autonomous cybersecurity system—to market.

- Optimized queries associated with defect reporting endpoints to decrease page load times by 24%
- Built a reporting dashboard using Postgres, SQLAlchemy & React (reCharts) to provide easily consumable insights and increase engagement with non-developer users of the Mayhem platform
- Worked independently and as part of short-term & rapidly evolving teams to add various interface (Core Library/UI/API/CLI) features such as GitHub OAuth aimed at enabling users to easily integrate Mayhem into their existing CI/CD pipelines (Jenkins, GitLab, GitHub) and reducing customer onboarding times
- Continuously & actively improved internal testing infrastructure using pytest fixtures to increase reusability & test coverage by 8%
- Refactored database garbage collector queries to minimize the number of test cases stored in database & provide faster test suite download and regression testing times for customers

Pivony **May 2020 – Oct 2020**
Junior Backend Developer Remote

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

- Built a preprocessing micro service using SQLAlchemy, Docker, and Dask to provide multilingual sentiment analysis, text tokenization, & keyword extraction; optimized the service using multithreading resulting in a 55% decrease 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
- Utilized multi-core EC2 instances in conjunction with docker & Kubernetes to efficiently scale services horizontally and reduce EC2 swarm by 90%
- Designed and implemented a RESTful API to provide a universal gateway to various micro services using nginx, Flask, SQLAlchemy, and AWS RDS

Software Design Studio **Jan 2017 – Aug 2017**
Software Engineer Intern Portland, OR

Got introduced to various programming tools such as Flask, JavaScript, Postgres, HTML/CSS/JavaScript, Git, & Linux culminating in a fleet management / geolocation tracking web application to automate vehicle management.

- Developed a geolocation tracking engine using jQuery, Flask, PostgreSQL, and Google Maps API to accurately estimate trip duration, efficiently manage fleet, and remotely monitor vehicle locations
- Created a user authentication & authorization middleware using Flask, PostgreSQL and python decorators
- Implemented reusable & responsive user centric UI components using bootstrap, JavaScript & CSS
- Leveraged jinja2 and Flask template inheritance to develop reusable components and optimize UI development workflow

Education

Bachelor of Arts, Computer Science **Aug 2015 – Jan 2020**
Reed College Portland, OR
Thesis **:** Scalable Learning for the Odd-Man-Out Task with Applications to Word Vector Induction

Study Abroad, Informatics **Sep 2017 – Jun 2018**
University of Sussex Brighton, UK

Projects

mok **Oct 2020 – Present**
A pseudo-random CSV, JSON, Parquet, XLSX file generator package written in python

jval **Oct 2020 – Present**
An open source python package to perform type / value validation on JSON documents

flask_rl **Oct 2020 – Present**
An open source Flask extension to perform sliding window rate limiting based on request IP address