
PROFESSIONAL EXPERIENCE

Booz Allen Hamilton, Remote

March 2021 – Current

Associate / Senior Software Engineer

- Lead, mentor, and manage small team of engineers on multiple occasions while performing product/sprint-planning and curation of Jira tickets
- Explore generative AI through R&D by experimenting with RAG + LLM solutions for Q&A without hallucination
- Led development roadmap for a full-stack TypeScript web application, driving adoption of best practices and maintaining high code quality & security standards
- Expand on existing Dockerized Python/Django + ReactJS + PostgreSQL web app by building out new features & functionality while adhering to web security standards
- Pioneer construction of scalable, end-to-end ETL data pipeline in AWS with EC2, S3, RDS (PostgreSQL), & Lambda
- Create/improve automated jobs, notably vulnerability scanning with custom PDF report generation
- Rapidly build various web apps/services, such as lightweight, easy-to-use network simulation tool and ML model marketplace front-end POC
- Assist with slide deck creation by creating videos demoing new web app functionality ultimately presented to the executive team as well as in high-level client meetings
- Communicate status of various technical tasks & blockers to client during weekly meetings
- Build out specific proof-of-concepts through R&D for internal strategic projects

Nativo Inc., El Segundo, CA

July 2017 – February 2021

Software Engineer – Web Team

- Collaborate with team members to build web app that displays useful metrics and information to advertisers & publishers using Python/Flask + Jinja, AngularJS, VueJS, SQL Server, SQLAlchemy, and more
- Architect company's essential Chrome extension and automated screenshot service using Python + Chromium (headless) + S3 + SQS + Docker as well as internal tools & automation to improve employee productivity
- Improve internal processes through the development of various web tools, such as generating XML based on user input and converting legacy XML to JSON then into HTML to drastically simplify UI and user experience (UX)
- Leverage Python libraries (ex. pyinstrument) to help measure performance of all web app endpoints, expanding the toolkit of our engineers and even allow us to diagnose issues in our production environment
- Work in an AGILE environment out of Jira in sprint cycles and communicate with product and other various stakeholders to develop internal and client-facing features
- Mentor new hires on platform and Support Engineers on platform, tech stack, and Python scripting tasks

Nativo Inc., El Segundo, CA

November 2015 – July 2017

Junior Software Engineer

As an active, integral part of the effort to develop Nativo's next generation platform, top priorities are passion for leveraging technology & software to solve problems and maximize productivity & efficiency, plus:

- Use Python to build & manage tools that automate reporting and other processes by using Selenium, AWS (S3/SQS/SES), Google Spreadsheets API, SQL Server, multithreading, and more
- Support the business by researching, building, and maintaining applications and widgets using front-end (HTML/CSS/JavaScript) + back-end technologies (Python/PHP), ranging from client-facing to internal usage, such as building a company Chrome extension
- Transition proof-of-concept development into production-level applications in accordance with best practices
- Analyze and resolve application problems
- Participate in peer-reviews with Senior team members and expand knowledge of technology stack
- Provide technical support to Support Engineers (where needed) and mentor/train new hires

PROJECTS

InsightSphere

February 2024

- Created ETL job to sanitize & ingest 75M+ Amazon product reviews dataset, storing in SQLite database
- Tested text classification model (roberta-base-go_emotions) on product reviews subset to determine sentiment accuracy and local inference performance

- Architected Python + FastAPI back-end APIs to power ReactJS front-end with React Wordcloud visualizations

Mr. Meet Maps

May 2019 – Ongoing (automated)

- Built full-stack web app from the ground up, powered by VueJS front-end + Python/Flask backend
- Aggregate sport-specific competition data with automated scripts that populate PostgreSQL database on AWS RDS
- Leverage Google Geocoding API to convert addresses to latitude & longitude for precise plotting of map markers on custom Leaflet + MapBox map
- Handle DevOps-related tasks, such as server deployment: AWS Route 53 + AWS EC2 + NGINX + uWSGI

PyWeather Report & Analysis

July 2015 – May 2018

- Gathered weather data on personal Raspberry Pi using Python and Google's weather API since July 2015
- Sends text message with Twilio's Python API to family/friends every morning with daily weather forecast including high/low temperature, conditions, sunrise, sunset, and friendly greeting
- Converted weather data stored as CSV to JSON then upload to AWS S3 bucket
- Made website that uses Google Visualization API and displays weather data retrieved from S3

LANGUAGES + TECHNOLOGIES

- Python, JavaScript, TypeScript, VueJS, ReactJS, AngularJS, NodeJS, HTML5, CSS3, SASS/LESS, MSSQL Server, PostgreSQL, Oracle DB, SQLite, Flask, Django, SQLAlchemy
- GitHub, GitLab, Docker, Jenkins, Jira, Confluence, MapBox, AWS (EC2, S3, SQS, SES, RDS, Lambda, & more), Twilio, Chrome Extensions, Elasticsearch, Headless Chrome, Selenium, PhantomJS

EDUCATION

Indiana University, Bloomington, IN

May 2014

Bachelor of Science in Informatics

Cognate in Business

EXTRACURRICULAR + ACHIEVEMENTS

- Certification: AWS Cloud Practitioner
- Certification: CompTIA Security+
- Certification: Leadership Excellence Course (Academy Leadership, LLC)
- Certification: USA Weightlifting Sport Performance Coach (L1) & competitive weightlifter
- Indiana University Diving Team Member, 2010-14
- Honorable Mention Academic All-American, 2012-13
- Volunteer at Indiana University Aquatic Facility, 2010-14
- Schurz Innovation Challenge Finalist (*Schurz Code Hunt*), Fall 2012