ROBERT SHELTON

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EXPERIENCE

Tech Lead | Sr. Software Engineer
Torqata Data & Analytics

📅 Dec 2021 - Jan 2024   📍 Richmond, Virginia

- Led development and maintenance for an automated replenishment system responsible for ordering ~$10,000 worth of tires nightly.
- Facilitated strategic product meetings and coordinated the execution timeline for implementing new features.
- Greenfield team member tasked with creating a Pub/Sub, FastAPI back-end ordering system, along with an Angular/Typescript front-end.
- Utilized Helm, Kubernetes, Terraform, and GitHub Workflows on GCP for streaming microservice architecture.
- Conducted ad hoc inventory analysis to provide retailers with stocking recommendations and inventory metrics.
- Managed alerting and logging to ensure high availability and team well-being.

Data Engineer
Levvel.io

📅 July 2020 - Dec 2021   📍 Charlotte, North Carolina

- Served as the primary developer for a Python microservice facilitating pallet movement in warehouses based on an academic white paper.
- Conducted maintenance, training, and input/output operations for a TensorFlow-backed neural network with substantial data requirements.
- Implemented threading logic for a long-running algorithm, reducing system wait time.
- Established and maintained continuous integration processes for deploying algorithms to various warehouse systems.

Inventory Manager
Micah's Backpack | Weekend Feeding Program

📅 Sep 2017 – May 2020   📍 Blacksburg, Virginia

- Gained significant depth on what it means to be a leader, what it means to serve others, in addition to honing my skills in crisis management, public speaking, and teamwork.
- Consolidated ordering practices, resulting in a roughly 20% reduction in median order cost, with an estimated impact of $11,000 over school months.
- Joined the board during the Covid crisis to aid in the director's transition and modified the delivery strategy.

Software Co-Op Associate
Excella Consulting

📅 Jan 2018 – Jan 2020   📍 Blacksburg, Virginia

- Crafted an academic website rooted in the REST API pattern and SOLID principles, utilizing Angular 6, .NET Core, Entity Framework, and PostgreSQL.

EDUCATION

Virginia Tech
Industrial & Systems Engineering 2020

Kubernetes
Certified Application developer 2022

Amazon Web Services
Certified AWS developer 2020

Agile
Certified Scrum Master 2018

CODING

Data Science/Engineering: 3+ years working with pandas, numpy, BigQuery, and SQL-like tools, with a strong background in statistics, probability, and linear programming for descriptive and inferential use. Additional experience with Tensorflow for supervised learning, Gurobipy for optimization, and simpy for simulation.

Backend: 3+ years of work experience with FastAPI, Flask, SQLAlchemy, Pydantic, Poetry, pytest, etc., in addition to a well-developed understanding of patterns and best practices.

Frontend: 2+ years of work experience with Javascript/Typescript frameworks, primarily focusing on Angular, complemented by project experience with React and Vue.

Cloud/DevOps: Kubernetes, Terraform, Docker, git, GCP (Pub/Sub, BigQuery, CloudFunctions etc.) AWS (EC2, lambda, S3, etc.), Github/BitBucket actions

PROJECTS

Sustainable Biomass Feedstock Logistics

Created an interactive Google Maps decision support tool leveraging Gurobipy and Simpy for optimization/simulation of sustainable biofuel supply lines.

Data Science for Social Good Workshop

Interviewed experts in mechanism design and created video content to educate others.

Bullwhip Effect Game Simulator

Built CLI based game for illustrating the demand/supply bullwhip effect. Included distribution based selection and graph visualization.