

# **Drew Royster**

Full stack engineer with broad experience including in AI/ML

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#### **EXPERIENCE**

Shaolin AI, Remote (Part Time) — ML Engineer

#### August 2023 - PRESENT

- Architected and developed the data ingestion and inference pipeline for our Group Networking Application, which allows users to find members of a group by embeddings of their key characteristics. It also allows filtering by location through raw function calls within the search in natural language. For example, users can search "I need an AI Engineer in Utah" and get results near that location with embeddings similar to "AI Engineer".
- Deployed all services locally leveraging open-source embedding and inference models. Accessible through CloudFront. Stack VUE 3, python, docker, unraid, pgvector

#### Alio, Remote — Lead Software Engineer

#### August 2021 - PRESENT

• Led a team of 4 engineers to bring our remote patient monitoring system through an FDA clearance to commercial use.

- Productionized data science algorithm machine learning pipelines for scale and reliability.
- Designed and developed dozens of features from notification systems to data pipelines. Using Vue, Python, and PostgreSQL.
- Implemented the strangler pattern to remove many legacy features and consolidate functionality in our kubernetes cluster with python microservices.
- Created Helm Charts for our legacy applications to allow reliability and reproduce-ability through infrastructure as code.

#### YBA Shirts, Orem UT — Full Stack Software Engineer

#### January 2021 - August 2021

- Maintained and modernized a legacy React and Node app for custom in-house software, removing thousands of lines and adding many dozens of features
- Implemented a Shopify integration to allow multiple income streams to our platform.

## Utah County, Provo UT — Full Stack Software Engineer

#### June 2020 - December 2020

- Led a team of 3 engineers to develop a vaccine scheduling web application using Nuxt/Vue and Node.
- Developed the application infrastructure on Oracle Cloud with full autoscaling support.
- Integrated with Active Directory for SAML SSO.

#### Blytzpay, Lehi UT — Full Stack Software Engineer

#### November 2019 - May 2020

- Built approximately a dozen web pages in Vue and their corresponding Python backend for the admin console of Blytzpay.
- Developed the end to end WebSocket system allowing us to send texts through the admin portal and see responses in real time on multiple browsers by managing sessions in DynamoDB.
- Built out the Twilio integration to send and receive text messages.

# Trivir, American Fork UT — Software Engineer

#### January 2019 - November 2019

- Drove migrations and supported integrations with Access Management products such as Forgerock.
- Rewrote much of the State of Georgia's court website using Vue.js.

#### Canvas File Sync, Provo UT — Owner

#### June 2018 - January 2019

- Created a desktop app that allows Canvas users to sync their course files with their local machines in a Google Drive-like experience.
- The tech stack involved Electron.js, Vue, Vuetify, Node.js, GitHub Releases, TravisCI, and Code Signing.
- Hundreds of people downloaded my app, and it was promoted by UVU.

# RedX, Orem UT — QA Engineer - Software Engineer

#### June 2017 - September 2018

- As a QA engineer, developed an automated test framework which included Jenkins, Dockerized Test Bots, and a server to load balance user accounts.
- After automating away most responsibilities, was promoted to the role of Software Engineer.

## Insidesales, Springville UT — Software Engineer Intern

#### May 2016 - June 2017

• Maintained and built out new features to our monitoring solution using Python, Nagios, AWS, Docker, Grafana, and InfluxDB.

# Microfocus (Formerly Novell), Springville UT — QA Engineer Intern May 2015 - June 2016

• Built out hundreds of automated tests using Java, Selenium and TestNG.

# Intel, Folsom CA — Technical Marketing Engineer Intern

## May 2014 - June 2014

 Assisted the technical marketing team in developing automated demo systems which were used globally. We used autoit to automate interactions that lean on CPU utilization to demonstrate intel's capabilities using auto it.

#### **SKILLS**

- Pytorch
- Kubernetes
- Helm
- TensorFlow
- Docker
- Vue Vue.js
- Python

- React React.js
- Electron Electron.js
- Javascript
- Typescript
- MongoDB
- PostgreSQL
- PgVector
- Rabbitmq
- Lambdas
- LLM's
- Machine Learning
- RAG
- Vector Embeddings Search

# Education

Utah Valley University Computer Science

Shaolin AI

AI/ML Bootcamp