# Shaishav Shah

# Education

# University of Alberta

Sep. 2020 - May 2024

 $Specialization \ in \ Computing \ Science -- Business \ Minor; \ GPA: \ 4.0/4.0$ 

Edmonton, Alberta

Relevant Student Groups:

- Students for Machine Learning in Business Director of Programming
- Algorithmic Trading Club Member

# Experience

#### Niricson Software Inc.

May 2022 - Aug 2022

Full Stack Software Engineer Intern

Victoria, Canada

- Automated the machine learning workflow in **Python** to dynamically reserve, utilize, and terminate **cloud GPU instances**, saving \$16,800 yearly.
- Introduced a new **geospatial vector data** format for **AWS DocumentDB**, holding over **50%** more data points, while reducing loading time by **80%**.
- Optimized time-complexity of existing and new Javascript algorithms, allowing for users to visualize and customize 500,000+ data points dynamically.
- Designed and created REST API endpoints in **Java Spring Boot**, following **object-oriented** programming and various **software design patterns**.

# **Projects**

Meal Drop Jan 2022

- Engineered a **full-stack** application utilizing the **MERN** stack, mitigating food wastage by allowing restaurants to schedule pickups.
- Leveraged **JWTs** to create a **client-side authentication** solution, securing the application and providing **persistent sessions** for users.
- Implemented a **RESTful API** in **Express.JS** to handle **client-side requests**, allowing users to perform CRUD operations with pickup postings.
- Deployed application on Netlify and Heroku to follow the server-less architecture model.

### Algorithmic Crypto-Bot

Aug 2021

- Developed a bot using **Python** and CCXT to identify cryptocurrencies for bullish / bearish candlestick patterns, resulting in an average **22% APY**.
- Leveraged Twilio to generate text message alerts, notifying users of any coin satisfying the required conditions.
- Deployed an **EC2** instance to run on **AWS**, automating the hourly analysis with Cron.

# Memories - Web App

Oct 2021

- Designed a full-stack web application allowing users to create, view, comment, and delete posts with images.
- Developed using **React** and **Material-UI**, allowing for users to experience a consistent and responsive design.
- Implemented **Redux** with **FLUX design patterns** for updating the application state, keeping code predictable between client and state interactions.

## Technical Skills

Languages: Java, C, C++, Python, JavaScript, HTML, CSS

Technologies: Spring, Express.js, Postgres SQL, MongoDB, Node.js, React.js, Redux, Vue.js

Infrastructure: AWS EC2, SES / SNS, S3, RDS, EFS, Google Cloud, Firebase, Git

Learning: Blockchain, Solidity, ASP.NET