# **Aman Shah**

### SKILLS

Languages/OS: Python, C/C++, Java, HTML/CSS, JavaScript, SQL, TypeScript, Swift, Shell Script, PLC, Linux

Frameworks/Libraries: ReactJS, Django, VueJS, TensorFlow, NodeJS, Numpy, Pandas, Siemens TIA

Tools: MongoDB, Postman, Git/Github, PostgreSQL, MySQL, SQLite, Swagger, Oracle Cloud, IBM Cloud

Certifications: Oracle Cloud Infrastructure Foundations 2021 Certified Associate

## EXPERIENCE

#### Eclipse Automation - Acquired by Accenture

Jan 2023 - Apr 2023

 $Cambridge,\ ON$ 

Controls Software Designer Co-op

- Collaborated with the largest electric vehicle company on developing an automated battery assembly system, leveraging Siemens PLCs and HMI programming to optimize production throughput by 20%.
- Programmed Fanuc robot for motion path creation, program customization, and performance optimization.
- Designed, programmed, and implemented **30+ features** in HMI and PLC, including safety, actuation, and **data display functionality**, resulting in enhanced performance and functionality of automotive systems.

GrantMatch May 2022 - Aug 2022

Junior Software Developer Co-op

Waterloo, ON

Waterloo, ON

- Programmed a platform to aid data librarians to upload 4500+ grants for clients to apply and receive funding.
- Developed 60+ web pages with login, data-grid-view paging, and data manipulation functionality with HTML, SQL, and VueJS, improving platform performance by 77% and user accessibility by 62%.
- Migrated Laravel codebase to **Django** solution; Implemented VueJS forms and performed unit testing in **Jest**.

## Teenager Startups/Teenivo Inc.

Nov 2019 - Present

Co-Founder/Developer

- Developed a platform of 500+ teenagers to share and connect their business ideas with one another.
- Created a responsive front-end for Teenager Startups' website with 30+ immersive features using ReactJS.
- Built REST API framework using Django and ORM queries to exchange data with PostgreSQL.
- Designed public API services using **Swagger** and the website/app is hosted on **IBM Cloud** for data security.
- Programmed Teenivo's app in Flutter and used Teenager Startups' database and API to save 50% of time.

#### PROJECTS

Blogging Application  $\mathbf{O} \mid HTML$ , CSS, JavaScript, Node.js, Bootstrap, MongoDB, React

- Created a responsive CRUD app using REST API to allow users to manipulate their posts and profile.
- Developed the back-end with **NodeJS** and used **HTTP** methods to send information from forms to the server.
- Utilized Context API to exchange user information and blog data stored in an atlas MongoDB cluster.
- Implemented **Axios** to send asynchronous HTTP requests to REST endpoints to perform CRUD operations.
- Designed a front-end interface using **React**, **HTML/CSS** and **JavaScript**; Utilized **Postman** for API testing.

Budget Guard () | Node.js, React, React Bootstrap, JavaScript

- Created a CRUD app to keep track of expenses by calculating the difference between entered income and expenses.
- Designed a responsive UI in **ReactJS** and **React BootStrap**, using React Hooks to achieve **33**% more efficiency.
- Implemented search functionality and used **local storage** to view previously added budgets and expenses.

Amazon Review Sentiment Analysis | Python, NumPy, Pandas, Naive Bias, Word2Vec

- Performed sentiment analysis of review dataset into Binary-label as well as 5-label classes by using NLP and ML models like Naive Bias, Word2Vec, and feedforward neural network to achieve around 93% efficiency.
- Cleaned, analyzed data, and compared hidden layer's activation functions such as **ReLu**, **sigmoid**, and **tanh**.
- Used matplotlib, Keras, Pandas, and SkLearn for preprocessing and manipulating data to achieve higher accuracy.

Gesture Detector | Python, TFOD, CUDA, cuDNN

- Programmed a real-time object detection system for 5 gestures with 83% precision and 84% recall.
- Preprocessed 100+ images to feed into a training model and performance tuned to increase precision and recall.
- Trained deep learning powered object detection models using TFOD, Python and CUDA/cuDNN.

#### EDUCATION

## University of Waterloo

In Progress

Bachelor of Applied Science, Honours Mechatronics Engineering Co-op

Waterloo, ON

INTERESTS