

Param Shah

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SKILLS

Languages: Python, Java, JavaScript, C, C++, C#, HTML, CSS, SQL, Bash, R

Frameworks: React, Angular, Node, Bootstrap, jQuery, Flask, Django

Technologies: Linux, Git, Jenkins, Docker, AWS, Microsoft Azure, Selenium, MongoDB, PostgreSQL, Power BI

EXPERIENCE

QA Automation Engineer

May 2024 - Aug 2024

Axonify Inc.

Waterloo, Canada

- Automated over 100 manual test cases using **Java**, **Selenium** and **Katalon Studio**, reducing manual testing efforts by 60% and improving test efficiency.
- Deployed and managed scalable test environments on **AWS** using **EC2**, **S3**, and **CloudFormation**, ensuring high availability and reducing infrastructure costs by 20%.
- Implemented and optimized **Jenkins CI/CD** pipelines to automate build, test, and deployment processes, reducing manual intervention and accelerating release cycles by 40%.
- Streamlined automated testing workflows by deploying test environments with **Docker** and **Kubernetes**, reducing environment setup time by 35% and ensuring consistency across multiple test environments.

Data Engineer

Jan 2024 - Present

UW Stocks Club - Quantitative Research

Waterloo, Canada

- Built algorithmic trading strategies using **PPO** in a custom **Gymnasium environment**, increasing portfolio returns by **33%** over benchmark, leveraging **TensorFlow** for reinforcement learning.
- Developed multi-stage aggregation pipelines that processed and transformed data directly within **MongoDB**, reducing data processing time from 4 hours to 30 minutes.
- Designed and implemented data pipelines using **SQL**, **Python**, and **Apache Airflow**, reducing ETL job time by 40%.

Technical Analyst

Sept 2023 - Dec 2023

Techtronic Industries

Toronto, Canada

- Developed a **Python automation script** for imaging new-hire laptops, resulting in a substantial 63% reduction in the time required for the process—from 45 minutes to 17 minutes.
- Developed a robust data and reporting system using **Python**, **Tableau**, and **SQL**, providing insights into product analytics, marketing funnels, and essential KPIs, benefiting the marketing, supply chain, and brand teams.

Software Engineering Intern

May 2022 - Aug 2022

Neocab Industries

India

- Developed a **full-stack** E-Commerce Website and application, increasing sales by 200%, Worked with 5 other interns under the guidance of a senior software engineer.
- Refactored **C++** and **Java code**, helping to cut maintenance by 15% and improving app performance.
- Built a custom notification system with **JavaScript** and **WebSocket** improving real-time communications between employees and supervisors.

PROJECTS

EasyInvest | Python(*FinQuant, EODHD API, Seaborn, Pandas, Numpy, PyWidgets, PyDisplay*)

- Developed a personalized investment portfolio tool using **Python** and **API integrations(FinQuant, EOD)**, enabling users to assess risk profiles and visualize optimized **ETF** allocations based on individual preferences.
- Implemented a dynamic dashboard using **data analysis libraries to track ETF** performance, asset allocation, and key financial metrics, facilitating accessible decision-making for non-technical users.
- Utilized **ML techniques** and **financial APIs** to query, cleanse, and analyze historical and projected ETF data, providing insights on returns, volatility, Sharpe ratios, and sector-based performance.

RedWish | HTML, CSS, JavaScript, Bootstrap, jQuery, Firebase

- Designed a front-end website connecting donors, recipients, & blood banks, thus streamlining blood transfusion
- Used **HTML**, **CSS**, **JS**, **Bootstrap** and **jQuery** to implement a responsive user-friendly interface.
- Created a conversational chatbot using **DialogFlow API**, improving user engagement and increasing productivity by 18%.

EDUCATION

University of Waterloo

Sept 2022 - May 2026

– Bachelors in Honours Mathematics joint Major in Statistics and Computing