Yajas Malhotra

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Skills

Languages: Java, JavaScript/TypeScript, Python, SQL, R
Technologies: Node.js, React.js, Spring Boot, Flask, Docker, Kafka, Nginx, Heroku, OpenShift, MongoDB, Git
ML/AI: Numpy, Matplotlib, TensorFlow, Sci-Kit Learn, NLTK, PyTorch

Experience

Citi   Jul 2023 – Present
Software Developer | Algorithmic Trading Dev Team   *Toronto, ON*

- Prototyped new blotter for trading engine using Typescript and React.js, **reducing memory usage by ∼85%** over legacy application.
- Developed translation layer with Java, **making new application backwards compatible** with existing container infrastructure.
- Engineered a Spring Boot microservice to retrieve and publish **20 million JSON messages daily via WebSocket**.
- Managed the upgrade of credit products with **Openshift and AWS Elastic Kubernetes Service**, delivering successful deployments daily.
- Built an error-reporting script with Python, **reducing manual log isolation from 2 hours to seconds.**

Visual Cognition Lab   Nov 2021 – Jun 2023
Software Developer | Experiment Framework Team   *Vancouver, BC*

- Performed framework updates on in-house **JavaScript** plugins that interfaced with **Node.js** project libraries.
- Refactored backend architecture for uploading trial data to Google Cloud Platform, **decreasing upload time by ∼60%**.
- Rewrote Firebase handler to reduce unnecessary server reads, **cutting billing costs by 20%**
- Deployed web application to Heroku, allowing **remote access for up to 200 participants** per term.

CarDekho   May 2021 – Jul 2021
Data Science Intern | Moderation Team   *Remote*

- Spearheaded development on a review-moderation REST API in Flask, **achieving 72% accuracy.**
- Utilized Python's NLTK library to **implement sentiment analysis, verifying comment relevance to content**, and returning comment metrics as a JSON object.

Projects

 BallGobbler Bot | C#, Unity ML-Agents, TensorFlow, PyTorch   Apr 2022

- **A robot built in Unity and C#**, trained using generative adversarial imitation learning and behavioural cloning.
- Used TensorFlow libraries to **implement reinforcement learning** for actions such as collecting items, attacking opponent bots, and evading attacks.

Education

University of British Columbia
BSc. Cognitive Systems (Computer Science and Psychology)   *Vancouver, BC*