RUDRAKSH MONGA

linkedin.com/in/rudraksh-monga | github.com/whyismynamerudy | whyismynamerudy.tech

EDUCATION

University of Toronto

Sep 2021 - May 2026

BSc. in Computer Science; Minor: Maths, Stats; CGPA: 3.94/4.00

Relevant Courses: Machine Learning, Data Structures, Statistics, Linear Algebra

Toronto, Ontario, CA

TECHNICAL EXPERIENCE

AI/NLP Engineer

Sep 2023 – Present

Urban Data Center, University of Toronto

Toronto, Ontario, CA

- Engineered a novel knowledge source for a Natural Language Understanding (NLU) system by fine-tuning the **RoBERTa large language model** to >93% accuracy using **transfer learning** for NER.
- Independently conducted a **comparative study** to determine the impact of specific entities on overall accuracy, providing insights into the significance of distinct entities within the model.

Co-Founder, CTO, Lead Programmer

Apr 2023 – Present *Toronto, Ontario, CA*

1Kit

- Established an **ed-tech startup** addressing information management and productivity challenges for students and researchers.
- Employed **agile scrum sprints** to develop an MVP consisting of a browser extension, RESTful API, and user-facing website, using AWS Code Pipeline for **continuous delivery**.
- Spearheaded the design of a scalable infrastructure on AWS and created and optimized schema for an AWS RDS-hosted database, **minimizing AWS costs by 29.17%**.

Full-Stack Developer

Jan 2023 – Aug 2023

Hack the 6ix

Toronto, Ontario, CA

• Developed reusable, stylized components in React and TypeScript for the hackathon's landing page, driving **3000+ unique views** and **1200+ hacker applications**.

Software Engineering Intern

Jul 2022 – Aug 2022

EnrichAI

Gurgaon, Haryana, IN

- Developed an automated testing suite consisting of **unit**, **integration**, **end-to-end**, **and functional tests** for an IoT waste collection solution using WebdriverIO and Selenium, automating >97% of tests and reducing testing time by **99.1%** (from 10 minutes to 32 seconds)...
- Facilitated identification of failed tests and increased **ease of test analysis** by automatically generating **color-coded reports** with screenshots and timestamps.

PROJECTS

Apache Superset Cloner | Python, Flask, React, Javascript, Firebase github.com/whyismynamerudy/clonerVCPOC

- Led a student team in an open-source **collaboration with UNICEF** to create a solution for seamless cloning of Apache Superset dashboards, **reducing deployment time by 93.6%** (from 15 minutes to 57 seconds).
- Designed a **custom cloud-based version control system** using Flask (Python) and Firebase to enable dashboard updates reversibility and propagation to all clones.

ShiftyTech | Python, TensorFlow, OpenCV, Milvus

github.com/whyismynamerudy/shiftyTech

- Hack the North 2023: Best Hack Built on Replit winner.
- **Mapped 21 body poses** to keywords and macros in Python, allowing developers to combine poses to write executable programs on Replit.
- Applied pose estimation models and kNNs for pose classification using a vector database of labeled poses.

Spotify MultiSelect | *TypeScript, React.js, Next.js, TailwindCSS* github.com/whyismynamerudy/spotify-multiselect

- Engineered a full stack solution that lets users add multiple tracks to a playlist at once, addressing a gap in the current Spotify ecosystem.
- Achieved a **67.11%** reduction in track addition time, yielding an average time-saving of **4.77 seconds per track** by utilizing the Spotify API for batch addition of tracks.

TECHNICAL SKILLS

Languages: Python, C/C++, C#, Java, JavaScript, TypeScript, SQL, Assembly, Shell Script, HTML/CSS, SCSS **ML/AI**: TensorFlow, PyTorch, scikit-learn, Keras, OpenCV, NumPy, SciPy, Pandas, Matplotlib, Seaborn **Frameworks**: React.js, Next.js, React Native, Svelte.js, Node.js, Express.js, Flask, Django, TailwindCSS **Utilities**: Git/GitHub, Amazon Web Services (AWS), Vertex AI (GCP), CI/CD, MongoDB, MySQL, PostgreSQL