Pranav Varma

pranavvarma603@gmail.com | linkedin.com/in/pranavarma | github.com/prannyv

EDUCATION

University of Western Ontario

Honours Specialization in Computer Science

Awards: Western Scholarship of Distinction, RBC Design Thinking Fellow, Dean's Honors List 2023

Relevant Coursework: Data Structures & Algorithms, Data Science, Software Tools, Linear Algebra, Discrete Math

EXPERIENCE

Systems & Software Developer Intern

May 2023 – Aug 2023

Office of the Chief Coroner, Ministry of the Solicitor General

Toronto, ON

Average: 90.3%

- \bullet Modernized coroner's databases in \mathbf{SQL} and Access by streamlining data retrieval, caching frequently accessed data, and reducing excess computation, resulting in a $\mathbf{22\%}$ decrease in database lookup and report building times
- Developed new case input website using **ReactJS** and **NodeJS** while conducting **8** user interviews to validate user experience centric design improvements allowing forensic pathologists to efficiently log **1300+** intake cases
- Implemented a **Tensorflow** based machine learning model in **Python** to identify bias in case narratives, scene descriptions, sociodemographic data, appearance details, and coroners' notes with 86% testing accuracy

Full-Stack Software Developer Intern

Apr 2023 – Aug 2023

Alibi

Toronto, ON

- Built the mobile application MVP for Alibi using React Native that led to 650+ bookings with 8 venues
- Led the end-to-end design and development of user flows for the app in **Figma** and implemented key pages with React Native and **Tailwind CSS** for users to visit their profile, settings, bookings, and login
- Configured one time password verification and account management of 120 users using Firebase authentication

Software Developer

Sept 2022 – Present

Western AI

London, ON

- Developed a space saving app that analyzes photo quality to determine if photos are blurry in a team of 4
- Created a natural learning model using Tensorflow Keras libraries in Python that has over 92% accuracy
- Designed mobile app with Flutter that uses model to analyze photos from an album and decreases storage by 16%
- Utilized SQL databases to efficiently back up photos and videos and further reduce phone storage by 13%

PROJECTS

Miso API | Python, Cohere, ReactJS, Flask | GitHub

A model that uses Cohere's Natural Language Processing to determine whether messages are gender discriminatory.

- \bullet Awarded the "Best Hack to Promote Female Empowerment Within STEM" at UofTHacks X
- Scraped various online databases to curate a dataset of 20,000+ lines that was used to train our model
- Implemented Miso via Python Discord Bot and ReactJS site with a RESTful API on Flask which yielded a 92% prediction accuracy for toxic messages and 84% prediction accuracy for gender discriminatory messages

Sightful | ReactJS, NodeJS, TypeScript, Express, Google Cloud API | GitHub

Chrome extension designed to simplify the Youtube experience by flagging all inappropriate or triggering content.

- Created Chrome extension using **React** and **Typescript** to develop hub for users to view flags on a certain video
- Used Google Cloud API to obtain Youtube links, convert videos to transcript, and generate timestamps
- Leveraged Node to create our machine learning back end and connected to front end using Express

Ivey Sustainability | ReactJS, NodeJS, TailwindCSS | GitHub

Web application on behalf of Ivey's Sustainability Branch for information about their faculty, events, and members.

- Developed a responsive web app using **ReactJS** and utilized **Tailwind CSS** to streamline application styling
- Designed 6 pages in **Figma** and optimized app for performance and **SEO**, ensuring fast load times and search engine visibility which has allowed us to maintain 800+ monthly active web users

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, SQL, Dart, HTML/CSS, C++

Frameworks/Tools: ReactJS, NodeJS, Express, Cohere, Flask, Flutter, Git, Unity, Xcode, Figma

Libraries: Tensorflow, Matplotlib, Tailwind, NumPy, OpenAI, SDL, Selenium