Amy **Gao**

(647) 778 3261 | amyy.gao@mail.utoronto.ca | amygaoo | agao

Education

University of Toronto
Sept. 2018 - Apr. 2023

B.S in **Computer Science** and **Data Science**

- 3.6/4.0 CGPA (2020 Dean's List Scholar)
- Relevant Coursework: Data Science, Software Design (Java), Operating Systems (C), Algorithm Design, Databases

Experience

MediaCat - Software Engineer
May. 2020 - Present

Python, JavaScript, Node.js

- Backend development on MediaCat, an open-source web application which crawls websites, Twitter and RSS feeds for references to reputable source articles for Professor Paz's research.
- Implemented a Python processor to extract keywords using Regex and form relationships between crawled articles.
- Utilized JavaScript libraries to improve parallel crawl of web pages, improving speed and efficiency of the application.

Skills

Languages: Python, Java, JavaScript, R, C, C++, HTML/CSS, SQL
Tools/ Frameworks: Git, PostgreSQL, React/React Native, Node.js, Android, Pandas, NumPy, Jupyter, Flask, Django

Projects

Appetite
github.com/amygaoo/Numina-Dashboard

React Native, Golang, MongoDB, CircleCI, Heroku

- Developed a cross-platform mobile app that recommends restaurants to users using an intuitive tinder-swiping interface based on user location, cuisine, price preferences as well as past saved restaurants.
- Frontend development with React Native and devised REST API to communicate with database.
- Integrated with Yelp API to retrieve restaurants personalized for each user and stored the data in our MongoDB database.
- Implemented CI/CD pipeline using Circle CI to automate testing as well as deployments to Expo and Heroku.

Interactive Numina Dashboard
github.com/amygaoo/Numina-Dashboard

Python, Jupyter, Numpy, Pandas, Plotly

- Created a web application that retrieves and cleans data collected from Numina sensors to analyze street-level activity.
- Sent queries to Numina GraphQL API to gather analytics data and performed extensive data cleaning and exploratory analysis using Jupyter notebooks, Pandas and NumPy.
- Utilized Plotly and Matplotlib to create dynamically rendered heatmaps and visualizations to investigate the correlation between traffic flow, pedestrian hotspots and time of day.

Dungeon Escape
github.com/amygaoo/Dungeon-Escape

Java, Android

- Developed an Android application consisting of multiple mini games with an emphasis on implementing class design patterns along with writing extendable code.

Extracurriculars

UofTHacks
Sept. 2019 - Present

Vice President of Logistics

- Led a team of 25 to successfully organize a hackathon of 500 students from all over North America.
- Spearheaded event logistics with various workshops and sponsors as well as managed communications between organizers and the UofT Computer Science Department.