

Michael Cai

michaelcai0213@gmail.com | <https://github.com/michael0419> | <https://www.linkedin.com/in/michaelcai0213/>

EDUCATION

New York University, Graduate School of Arts and Science, Courant

New York, NY

Masters of Science in Computer Science | GPA: 3.89/4.00

Expected May 2024

Queens College CUNY

Queens, NY

Bachelor of Science in Computer Science | GPA: 3.97/4.00 | Summa Cum Laude

May 2022

Relevant Coursework:

Cloud Computing, Computer Graphics, Data Structures & Algorithms, Databases, Internet & Web Technologies

SKILLS

Programming: C, C++, Java, Python, JavaScript, HTML, CSS, Node.js, React JS, SQL

Technologies: Git/Github, Docker, VS Code, Eclipse, React Native, MongoDB, Google Cloud Platform, Tensorflow, Linux

PROJECTS

Database Modeling and Model Training (SQL, Python), *CSCI-GA 2433 Database Systems, NYU*

Dec 2022

- Designed a database for an insurance company with 25+ tables and optimization for data lake analysis in Erwin.
- Proposed method to process the database in Google Cloud SQL for data analysis and machine learning.
- Demonstrated working database, trained a model on GCP, and visualized data with Google Data Fusion.

BeMuse (Python, Tensorflow, React Native)

Dec 2021

- Collaborated as a pair on a mobile app to recognize user emotion from images to suggest spotify playlists.
- Tested and performed transfer learning for emotion recognition model to ensure suitable accuracy.
- Developed an api endpoint for the machine learning model and in-app image processing for input.

FoodForThought (Javascript, React JS, CSS), *CUNY Hackathon 2021*

Jan 2021

- Constructed a web application in a team of 4 that allows users to pick an inspirational quote for the next user.
- Developed layered homepage animations using CSS and React JS.
- Guided implementation of APIs in Next.JS framework over the span of 24 hours.

ShortUrlScanner (Javascript, Node.js)

Dec 2020

- Created a Node.js server to scan potentially malicious URLs and return a shortened result URL for easy sharing.
- Incorporated the use of OAuth 2.0 APIs and caching to reduce excess api calls.
- Implemented request processing in Node.js to protect against improper usage.

RELEVANT EXPERIENCE

BigSibTutors

New York, NY

Operations and Automation Manager

Aug 2022 - Present

- Developed 5+ different automated scripts to increase efficiency in notifications and data processing.
- Managed design and content updates to the company website and Youtube channel.

CUNY Tech Prep

New York, NY

Fellow, Data Science

Jun 2021 - May 2022

- Learned Python 3, Jupyter Notebooks, Pandas, Numpy, Scikit-learn, SQL, exploratory data analysis (EDA), feature engineering, data collection and processing, statistical modeling, data visualization, and ML techniques.

QC Learning Commons, Queens College

Queens, NY

Tutor, Databases

Mar 2021 - May 2021

- Acted as a technical resource for 100 + students in the course "Database systems" and held weekly office hours
- Recommended by professor to assist students through Zoom in their coursework for databases and using T-SQL