

# Ethan Jiang

Legal name: Yi Jiang | Software Engineer

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## **Education**

## Northeastern University, Boston, MA

Sep 2019 - May 2023

• **Degree:** BSc in Computer Science

• Academics: GPA: 3.6/4.0 | Dean's Scholarship | Dean's List | QuestBridge Finalist

# **Work Experience**

## Software Engineer Intern

Aug 2022 - Dec 2022

Amazon, New York City, NY

- Architect a system that processes terabytes of data from customer search queries daily
- Utilize big data technologies such as Spark, Athena, Glue, EMR, and S3
- Communicate with product managers and stakeholders to deliver results

# Software Engineer Intern

Jun 2022 - Aug 2022

Capital One, McLean, VA

- Developed a self-service application to automate clients' workflows, significantly reducing on-call incidents
- Implemented REST APIs to send notification emails and to interact with MySQL databases
- Communicated with stakeholders to gather feedback; suggested ideas and presented weekly demos
- Wrote extensive documentations to help streamline software development across teams

# Software Developer Co-op

Jun 2021 - Dec 2021

Bayer, West Sacramento, CA (Remote)

- Developed web applications for data analytics and visualization; automated the workflow of scientists
- Improved app speeds by over 200% by parallelizing API requests and data operations
- Implemented CI/CD using GitHub, CodeBuild, Docker, and AWS Fargate with Load Balancers
- Wrote Python ETL scripts to update millions of rows of data in PostgreSQL databases (Amazon RDS)
- Collaborated with data engineers on managing data and building data pipelines

#### **Teaching Assistant CS 2810**

Jan 2021 - May 2021

# Khoury College of Computer Sciences, Boston, MA

- Held office hours for a course about Python, linear algebra, machine learning, and statistics
- Assessed 300+ students and provided feedback on weekly assignments and exams
- Collaborated with professor and TAs to provide academic support; responded daily to Piazza questions

#### Skills

**Languages:** Python, Java, SQL, JavaScript, TypeScript, HTML, CSS

Technologies: Git, Linux, Flask, Plotly Dash, Lit, React, Amazon Web Services, Docker, Jira

## **Projects**

## Discord Bots (Personal) - Python, TypeScript, SQLite

- Built bots to help manage Discord communities (100,000+ members)
- Implemented "Chat Roulette" so that members can join random, fun conversations
- Bots can monitor text channels and automatically respond to messages or inappropriate spam

#### CoveyTown (Group) - TypeScript, React, Twilio Video

- Virtual space where users can have simultaneous video calls, allowing participants to drift between different conversations
- Extended the app to implement objects that can be interacted with or moved around to play games like Chess or Tag

## DetectiveASL (Group) - OpenCV, Keras, Scikit-learn, Pandas, Matplotlib

- Classify images of American Sign Language utilizing Convolutional NN, Random Forest, and Adaboost
- Designed ConvNet architecture with convolutional layers each followed by a max pooling layer
- Applied a DropOut layer to prevent overfitting, and achieved 99% testing accuracy and F1-score of 0.99