

# Jingjing He

NY, 11201 USA | jingjinghe.work@gmail.com | (332)867-3036 | Open to relocate

## EDUCATION

### New York University

Master of Computer Engineering | GPA: 3.72 / 4.0

Sep 2022 - Expected May 2024

New York, NY

### The Chinese University of Hong Kong

Bachelor of Computer Science and Engineering | GPA: 3.44 / 4.0

Sep 2018 - Jul 2022

Shenzhen, China

## WORK EXPERIENCE

### Ibotta

Software Engineer Intern

May 2023 - Aug 2023

Denver, CO

- Created automated security posture reporting service in **Python**, in collaboration with **CloudInfra** and **SecOps** teams, leveraging **Steampipe** and **Okta** Security APIs.
- Deployed the auto-reporting services on **AWS EC2** with **CI/CD** using **Terraform**.
- Created automated security posture reporting service on **AWS EC2** with **CI/CD** in **Python** and **Terraform**, in collaboration with **CloudInfra** and **SecOps** teams, leveraging **Steampipe** and **Okta** Security APIs.
- Created **AWS** services including **IAM roles**, Secret Managers, Lambda, Simple Email Service using **Terraform**.
- Achieved an around 60% reduction in high-risk security vulnerabilities by adding auto-cleanup of inactive resources to reporting service, strengthening the security posture of cloud infrastructure.

### Microsoft

Software Engineer Intern

May 2022 - Aug 2022

Suzhou, China

- Participated in the development of root cause analysis service in M365 microservices architecture.
- Implemented user authentication with **OAuth2.0** protocol utilizing **Azure Active Directory** for secure access to Microsoft applications and employee services in **C#** and created documentation to manage user security groups.
- Added adaptive card feature to **Azure** bot in **.NET** framework deployed on Teams app, for better user interaction.
- Created and exposed a **RESTful APIs** to fetch diagnosis data, serving as a data provider for other services.
- Increased the average number of MS Teams user interactions per call from 3 to 7 (133% increase).

## PROJECTS

### ParkPass: Amusement Park Ticket Booking Web Application

- Collaborated with 2 group members to create an online ticket booking platform for an amusement park, incorporating user management features for normal, group, and VIP user accounts.
- Utilized **React.js** in front-end web and built RESTful APIs to interact with **SQL** database.
- Integrated user registration, profile management, and "forget password" functionalities.

### Mold Production & Scheduling Problem as Integer Optimization Problem

- Compared and analyzed pros & cons of multiple state-of-the-art algorithms in multi-objective optimization and produced seminar and technical documents.
- Implemented evolutionary algorithms including MOEA/D, NSGA3 to improve efficiency and guarantee solvability in high-dimensional optimization problem.
- **Cython** and **parallel programming** techniques used to optimize efficiency.
- Improved throughput 2 times in analyzation of 3000+ available data points.

### MCM/ICM Contest (2019): Analysis and Modeling of Football Team's Collaboration Strategy

- Collaborated with 2 group members and analyzed the coordination and configuration strategy of a successful football team based on a given dataset, using **Python** for data manipulation and **R** for visualizing graphs.
- Manipulated a large CSV dataset with 500,000+ rows using **Python** for data preprocessing and preparation and conducted academic literature reviews related to football team coordination.
- Developed logistic regression models in **R** using selected key features from raw data, aiding in modelling football team's performance. Implemented Dijkstra algorithm for matrix data in **MATLAB**.

## SKILLS

**Programming Languages:** C++, Python, C#, Java, HTML, CSS, SQL, MySQL

**Frameworks/Technologies:** PyTorch, .NET, .NET Core, MATLAB, Kubernetes, AWS, Azure, React, CI/CD