

# Jiaoying (Joy) Mu

Tel: (724) 351-2710 | Email: [jiaoyinm@andrew.cmu.edu](mailto:jiaoyinm@andrew.cmu.edu) | GHC 2021

LinkedIn: <https://www.linkedin.com/in/jiaoying-mu-7149a2aa>

## SKILLS

---

Java, Spring, JavaFX, Python, Django, Pytorch, HTML, CSS, Javascript, Database Management System(DBMS), NoSQL, Linux, Shell, Docker, Distributed Systems, Cloud Computing, Software Engineering, Git, CI/CD, Scrum, Agile Methodologies

## EDUCATION

---

**Heinz College, Carnegie Mellon University**, Pittsburgh, PA Aug 2019 – Dec 2021

Master of Information System Management, GPA 3.7

Relevant Courses: *Java Programming, Advanced Database Management, Web Application Development, API Design & Implementation, Agile Methods, Cloud Computing, Distributed Systems, Linux & Open Source, Machine Learning*

**School of Software, Tsinghua University**, Beijing, China Aug 2015 – Jun 2019

Bachelor of Engineering in Software Engineering, GPA 3.3

Relevant Courses: *Programming in C++, Programming in Python, Data Structure and Algorithms, Database Principles, Software Engineering, Computer Networks, Principles of Computer Architectures, Operating Systems*

## WORK EXPERIENCES

---

**Carnegie Mellon University**, Pittsburgh, PA, United States Jun 2021 – Aug 2021

*Software Development Intern*, CAOsLab, Department of Psychology

- Developed a multithreading module in a desktop application to receive and store 3D coordinate data from BrainLab device remotely in real-time using igtlink4j library and MongoDB.
- Designed the prototypes, implemented and tested the full functionality of experiment scoring view including searching/filtering experiment and displaying experiment details including video recording, scores and comments.
- Researched about auto updater module and configured CI/CD integration on GitLab for the project.

**Alibaba Group, Ant Financial**, Hangzhou, Zhejiang, China May 2020 – Sep 2020

*Java Backend Intern*, Alipay Merchant Service Division

- Participated in demand analysis, system analysis and test analysis meetings. Clarified the specific requirements, designed technical solutions and produced documents before developing new functions.
- Implemented and tested new features involving online transaction and contract signing using Spring framework and other middleware including message broker, zdal, scheduler, timeout, etc.
- Conducted cross department cooperation in complicated feature development and applied agile methods in project supervision, test-driven development and continuous delivery in software developing process.

**Didi Chuxing Technology Co.**, Beijing, Beijing, China Sep 2018 – Mar 2019

*Data Analyst Intern*, Didi Premier User Growth Division

- Extracted, visualized and analyzed data using HiveQL, Excel and Tableau on AB testing groups, which supported decision-making on business promotion schemes.
- Conducted crowd segmentations of DiDi Premier passenger members with chosen significant features. Helped conducted user-centered strategy and improved the rate of senior members by 18% in two months.
- Improved the efficiency of user behavior analysis with important features discovered with XGBoost model.

## PROJECT EXPERIENCES

---

**Social Media Website for Tourists (Python), Carnegie Mellon University** Apr 2021

- Developed a fabulous and robust travel blog sharing website with Django Framework, jQuery and MySQL.
- Integrated with Google Maps API to display and interact with the footprint of the users on the platform.
- Used Ajax and third-party libraries to update the display content and notifications dynamically.
- Deployed the website with SSL certificate on an AWS EC2 instance.

**Wikipedia Big Data Processing and Analysis (Java), Carnegie Mellon University** Feb 2020

- Developed a MapReduce Job to extract pageview information from a Wikipedia dataset of 60GB using AWS EMR.
- Aggregated the pageviews from hourly to daily views and calculated the monthly pageviews for each article and printed out popular article records chronologically in TSV format; Summarized the data with numpy & pandas libraries.

**Facial Detection and Recognition Project (Java), Carnegie Mellon University** Dec 2019

- Built a visitor management system which supported facial recognition and database visualization with JavaFX.
- Applied LBTF algorithm to detect real-time faces showed in the camera and compared with the facial records in the database to recognize the visitors.
- Applied Google Cloud Vision API to recognize facial expressions of the visitor and display the result.