

Qianhui Yu

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EDUCATION

Columbia University

09/2019 – 12/23/2020

- **M.S. in Electrical Engineering**, GPA: 3.78/4.00
New York, NY
- Courses: Analysis of Algorithms, Cloud Computing, Introduction to Databases, Big Data Analytics, Computer Networks, Introduction to Blockchain, Applied Deep Learning

Huazhong University of Science and Technology (HUST)

08/2015 – 06/2019

- **B.S. in Electrical Engineering**, GPA: 3.76/4.00
Wuhan, CN
- Courses: Data Structures, Computer Architecture, Digital Signal Processing, Probability Theory and Statistics, Pattern Classification, Computer Vision, Artificial Intelligence

SKILLS

Programming Languages: Java, Python, JavaScript, C/C++

Operating Systems: Windows, Linux, MacOS **Database:** SQL Server, MySQL, PostgreSQL, DynamoDB

Cloud Platform: AWS, Azure, GCP

Development Framework: Spring Boot, Django, Flask

Other Technologies: Spring Data JPA, MVC, Maven, Postman, Spark, HTML, Git, Elastic Search, Socket Programming

INTERNSHIP

Walmart Inc. Sam's Club

06/2020 – 08/2020

Software Engineer Intern

Bentonville, AK

- Redesigned and implemented the product database of Recovery Rate Optimization team.
- Enable the new database schema meet new business requirements (Liquidator on-boarding and club configuration).
- Developed two new features: Liquidator on-boarding and club configuration (including rate exception) with Spring Boot, Spring data JPA and SQL Server.
- Enable associates enter new liquidators into system and give them more control of configuring liquidators' business.
- Completed two sprints of general product support.

E-Navigation Information & Technology Co., Ltd

06/2019 – 08/2019

Software Engineer Intern

Hangzhou, CN

- Implemented Ship Route Planning Module with Java, Spring Boot, and MySQL.
- Remodeled the ship route planning service using the shortest path algorithm.
- Improved the response speed of route planning service (from harbor to harbor) by 28.3% on average.
- Initiated a new feature which enables our system to provide route planning service from any point to destination harbor.

PROJECTS

Intelligent and Secure Access System based on AWS (Python, JavaScript)

10/2019 – 12/2019

- **Backend:**
 - Established visitor filter with Lambda Function, Amazon Rekognition, and Dynamo DB.
 - Enabled system to distinguish between strangers and known visitors.
 - Created visitor authentication workflow with Lambda Function and API Gateway.
 - Enabled managers to authorize visitors' access.
 - Enabled system to store new visitors' faces and send one-time-password.
- **Frontend:**
 - Designed and Developed the visitor/manager portals
 - Integrated two web pages with API Gateway and Swagger.

Better Name More Money: Airbnb analysis (Django, Spark, HTML)

10/2019 – 12/2019

- Developed the web application using Django and generated the following listed functions' APIs for the application.
- Visualized significant words used in names of listings with high popularity by clustering and generating WordCloud.
- Recommended words that could bring more popularity for householders.
- Generated Airbnb price heat map and crime heat map with Google API.
- Developed and tuned popularity prediction tools based on Random Forest and XGBoost.
- Achieved lower MAE from 1.21 reviews (baseline) to 0.63 using Cross-Validation and Grid-Search.

Group shopping web application (Python, Flask)

10/2019 – 11/2019

- Designed and created the group shopping database in PostgreSQL.
- Implemented the demo functions including login, adding items, adjusting cart, placing orders, showing order history, and management mode with Flask.
- Deployed the application on the VM in GCP.