

RUI JIA

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

Master of Science, Computational Science and Engineering, GPA:3.5/4.0

Expected Dec 2020

Women of Science and Technology Institution, Student Alumni Association

Tongji University

Shanghai, CN

Bachelor of Engineering, GPA: 3.7/4.0

Sept. 2015-July 2019

Excellent student scholarship (2016-2018), Captain of College Debate Team

Study Abroad Program within Bachelor of Science, Data Science **National University of Singapore**

Singapore, SG

INTERNSHIP

Amazon

Seattle, WA

Software Engineer Internship (Remote Work)

May. 2020-Aug. 2020

Generated and deployed **worldwide** best seller badges shown on Amazon based on product concept. Shared dataset to more than 50 Amazon internal teams. Helped to improve customers shopping experience and enhance sellers ability to sell products.

- Checked concept product and added this attribute to Amazon worldwide dataset.
- Generated best seller badges based on product concept on AWS EMR, then stored dataset in S3.
- Modified AWS Step Function to merge new dataset to group pipeline and start production in group pipeline.
- Modified Data Service and Amazon API to send data to front end.
- Enabled A/B test tool in amazon (Weblab)

RIME-Research Institute on Mines and Environment

Montreal, CA

Software Development Engineer Internship

Feb. 2019-June 2019

Developed a service that uses image data to recognize particle size distribution of waste rock, which helps mining researchers in RIME reduce more than 80% labor cost.

- Implemented core algorithms that extracts diameter information from aggregate waste rocks with 91.3% accuracy.
- Used machine learning models to predict mass of particles through diameter and generated over 500 training data.
- Built GUI demo, based on polynomial regression, ridge regression, to let user calculate particle size distribution curve.
- Presented results to investors and wrote a report about this development. RIME **got funding** from investors to continue this project.
- Applied demo software on lab's current mining research.

PROJECTS

Recommendation Web Application

Sept.2019-Nov.2019

Developed an integrated residence finding tool for new coming to find suitable landlords or tenants. Used data from Yelp, Uber and Zillow.

- Used HTML, firebase and Deck.gl to build web UI, and visualize traffic, safety and point of interest information.
- Processed uber traffic big dataset and mapped location data with Open Street Map API.
- Designed a match function to help users find landlords and implemented SNS function.

Intelligent Transportation System

Aug. 2018-Dec. 2018

Led a group to develop an information system based on real world multi-source data to guide the transportation of dangerous goods.

- Used varied data sets and scrubbed data with **python** legally from website.
- Used **Numpy, Pandas, OpenRefine** to clean data and preprocess data. Changed multi-source data into uniform format with **C++**.
- Designed an intelligent transportation system with **C#** connected to **MySQL** database, and did route planning.
- Predicted bus arrival time with **machine learning models**, Recurrent **Neural Network** and LSTM, and achieved 94.31% +.
- Visualized analysis results on web based on **JavaScript, HTML5** and **D3.js**.
- Won the best business prize from Chinese HUALU Company (**US\$ 4285**)

Software Development about Measurement Data Correction

Apr. 2016-Mar.2018

- Developed a service with a group that can automatically correct sensor data, which increased measurement accuracy by 15%.
- Read and processed sensor data with Java from motion detector based on serial communication protocol.(**TCP/UDP**)
- Processed data with mathematic correction models. Predicted displacement value using time series analysis and ridge regression.
- **First Prize** of College Students Innovation and Entrepreneurship Forum. (**3 out of 200+**)

SKILLS

Languages: C++, Python, C#, Java, SQL, Linux-Shell, JavaScript, R, Scheme

Other: Tableau, OpenCV, Sklearn, D3.js, Linux, Git, TensorFlow, PyTorch, OpenRefine, SQL, MATLAB, Spark, Deck.gl. Machine Learning algorithm, Jenkins, AWS

Strength: Math, Documentation