

RUI JIA

rjia40@gatech.edu | 678-237-5226 | 935 Marietta ST NW Atlanta, GA 30318

Linkedin: <https://www.linkedin.com/in/rui-jia-9131ab17a/> Website: <https://rachelj1018.github.io/>

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 product nodes and added new feature to worldwide dataset, getting 29% products categories based on product concept.
- Generated best seller badges using product concept and stored generated dataset. Increased 33% total badges and optimized 44% badges category. Realized with AWS.
- Added new dataset generation to group pipeline and start production up to date datasets every hour.
- Modified Data Service and Amazon API to send data to front end, let customers can see new badges on web.
- Enabled A/B test tool in amazon, expected launch criteria is worldwide GCCP increase.

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