

# Jason Liu

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## PROFESSIONAL EXPERIENCE

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### Amazon Web Services (AWS)

Software Development Engineer II

October 2021–Now

- Lead new back-end architecture aiming to reduce region build times from eight months to four weeks
- Designed and optimized graph-heavy algorithms to ensure validity of dependencies on a per-change basis

Software Development Engineer

May 2020–October 2021

- Developed validation system for build date calculations and new cycle detection reporters
- Leveraged AWS services including DynamoDB, Lambda, and S3 with Java and Python for development

### JP Morgan Chase

June–August 2019

Software Development Intern

- Developed analytic application for American Depository Receipt (ADR) tracking billions in investments
- Designed architecture for ADR data in OracleDB and utilized Spring and Spring Integration, Redux, Axios
- Tested features with JUnit for unit testing, Cypress for end to end testing, and Jenkins for integration testing

### Capital One

June–August 2018

Associate Software Engineers

- Developed components and widgets for banking application, working with Angular 2.0 and Java
- Tested endpoint responses with Mountebank and created end to end testing with Cucumber and Protractor

Associate Software Engineer

June–August 2017

- Created internal analytical software to analyze financial health using AngularJS, Groovy, and Karma
- Learned and used Agile methodology by attending daily scrums, standups and using tools such as Jira

### Brain Health Alliance

Software Intern

June–September 2016

- Investigated potential of machine learning based web scraper for research focused semantic web
- Implemented a NoSQL MongoDB database with Mongoose ODM to store research metadata

## PROJECTS

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### Real-time Chat Semantic Stock Analyzer

- Analyzes text in real time on discord using Python and Keras, providing a granular source of stock sentiment
- Designed around resource constraint for real-time NLP by aggressively pre-processing streams of data
- Created a low-level execution of lemmatization and noise filtering as a proof of concept

### Flight and Hotel Price Scraper

- Aggregates data from flight and hotel sites to find the best price
- Utilized Python, Selenium, and AWS EC2 to continuous poll for price comparisons

## EDUCATION

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### University of Wisconsin-Madison

Bachelor of Science- GPA: 3.82

Madison, WI

Sept. 2017–May 2020

Major: Computer Science; Minor(s): Mathematics, Business

## HONORS AND ACHIEVEMENTS

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“Genetic Algorithm Based Descension for Improved Hyperparameters on Low Layer NN ” Author

2019

“New and Old Regulatory Politics in the Airline Industry” Research Contributor

2019–2020

Developed script for analytics and data scraper for airline data

Hack the North - Hardware Hack Award

2018

Academic Dean’s List

2017–2020

## SKILLS

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Programming Languages: Java, Python, JavaScript, C

Testing: JUnit, Pytest, Jest, Cypress

Frameworks: Guava, Keras, PyTorch, React

Misc: Git, Linux, Jira, Jenkins

Relevant Interests: Data Modeling and Neural Networks