

# Jason J. Lai

Atlanta, GA • 404-245-3010 • [jlai80@gatech.edu](mailto:jlai80@gatech.edu) • [www.linkedin.com/in/jasonlai150](http://www.linkedin.com/in/jasonlai150)

## EDUCATION

**GEORGIA INSTITUTE OF TECHNOLOGY, College of Computing**  
**Bachelor of Science in Computer Science, Mathematics Minor**  
**GPA: 4.0 / 4.0**

**Atlanta, Georgia**  
*Expected Graduation: May 2026*

- **Concentration:** Computational Intelligence and Information Networks
- **Involvement:** Generative Neural Graphics VIP, GT WebDev, Vietnamese Student Association
- **Relevant Coursework:**  
Machine Learning, Artificial Intelligence, Design & Analysis of Algorithms, Data Structures & Algorithms, Systems & Networks, Computer Organization & Programming, Database Systems, Objects & Design  
Statistics & Applications, Applied Combinatorics, Linear Algebra, Differential Equations, Multivariable Calculus

## EXPERIENCE

### SMURFIT WESTROCK

#### *Software & IT Intern*

**Atlanta, Georgia**  
*May 2024 - August 2024*

- Developed new data pipelines between ServiceNow and Qlik using Python REST APIs to automatically sync KPI, budget, and P&L data for 150+ projects, updating critical project metrics daily and allowing for dynamic BI visualizations
- Created a project proposal auditing tool using Python that harnesses Microsoft's Copilot LLM API to identify submitted proposals that require revision, ensuring quality and coverage of necessary information via an embedded web tool
- Assisted in the company's shift toward cloud storage and operation in AWS, attending several in-person Amazon hosted AWS workshops and helping parse and reformat JSON machine data for storage in AWS S3

### GEORGIA STATE UNIVERSITY

#### *Machine Learning Student Researcher*

**Atlanta, Georgia**  
*August 2022 - May 2023*

- Created a testing system for algorithm efficiency comparisons on novel multimodal sentiment analysis and adversarial attack prevention models using Python and SQL
- Performed data analysis, comparison, and visualization on test results using NumPy and Pandas to reveal quantifiable improvements of up to 17% over the previous state of the art methodologies
- Contributed to model architecture and hyper-parameter tuning utilizing manual and cross-validation testing in PyTorch

## PROJECTS

### NUTRITION TRACKING & MEAL PLANNING MOBILE APP

#### *Application Development*

*January 2024 - May 2024*

- Lead a small team through an agile-based software development lifecycle to iteratively design and improve a mobile application built with Java and deployed using Android Studio
- Integrated the app with Firebase's third-party Authentication and Real-time Database services to retain user data and track nutrition trends, store recipe and ingredient information, and preserve relevant account details
- Developed the app following an MVVM architecture and SOLID/GRASP design principles for ease of extension

### DATABASE DESIGN & IMPLEMENTATION FOR GROCERY DELIVERY SERVICE

#### *Database Engineering*

*February 2024 - April 2024*

- Designed and built a relational database system using MySQL to store and handle back-end data for a delivery service application that involving various users, stores, drivers, vehicles, products, order details, and more
- Followed database development methodologies beginning with designing an enhanced ERD diagram used to define relational schema with constraints before creating tables and adding necessary views and procedures
- Connected the built database to a React frontend interface for adding and viewing data by calling procedures

### SOCIAL COOKBOOK WEBSITE

#### *Full Stack Web Development*

*August 2023 - December 2023*

- Collaborated in a team to create a user-friendly web application for sharing and exploring cooking recipes
- Created the front-end display for each recipe post using React and wrote back-end RESTful API routes using Express and Node.js for creating, accessing, and updating user and post data in a MongoDB database.

## SKILLS AND EXPERTISE

**Programming:** Java, Python, C, MySQL, HTML, CSS, JavaScript

**Frameworks:** React, Node.js, Express, MongoDB, JUnit, Numpy, Pandas, Keras, Pytorch, LaTeX, XML

**Softwares/Tools:** Git, Docker, Jupyter Notebooks, Firebase, Android Studio, Unity, Microsoft Suite

**Concepts:** Object Oriented Programming, Software Development, Web Development, RESTful APIs, Design Principles, Database Management, Machine Learning, Statistical Analysis, Prompt Engineering

**Languages:** English (Fluent), Mandarin Chinese (Fluent)