

Ryan Ma

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

Masters of Science in Computer Science | GPA: 4.00

Expected December 2025

Bachelor of Science in Computer Science | GPA: 3.94 / Major GPA: 4.00

Expected December 2024

Threads: Artificial Intelligence, Systems and Architecture

Honors: Faculty Honors, Dean's List

EXPERIENCE

Undergraduate Teaching Assistant

Jan 2024 - Present

Georgia Institute of Technology College of Computing

Atlanta, GA

- Design and grade homework and exams for CS 3510 - Design and Analysis of Algorithms with 260 students
- Lead office hours and actively respond to Piazza posts to clarify course material, improving student performance

Software Engineer Intern

Jun 2024 - Aug 2024

Flatiron Health | React, C#, Visual Basic

New York, NY

- Coded a write back modal to allow physicians to save cancer biomarker information back to patient charts from molecular profile testing orders on OncoEMR, reducing manual data entry and streamlining the order workflow
- Added new backend layers to a monolithic architecture following existing design patterns allowing diagnoses and diagnoses factors to be saved at minimal extra cost and ensured modularity for future savable information
- Scoped out proper implementation of oncology features with designers and medical directors adhering to HIPPA

Software Engineer Intern

Jun 2023 - Aug 2023

MarketAxess | React, Java

New York, NY

- Built a trade ticket to provide trade detail analysis and to enable cancelling and amending of trades for clients, increasing usage of the new UI fixed income trading platform and increasing client satisfaction
- Utilized a microservice architecture to create real-time cancelling and amending functionality, allowing for seamless trading by reducing throttling and latency during key market movements

Software Engineer

Mar 2023 - Aug 2024

Georgia Tech Student Government Association IT Board | React, Node.js

Atlanta, GA

- Developed applications used to automate and support internal SGA processes and student funding requests
- Worked on a course roadmap planning application to help students determine how to plan out classes and their pre-requisites across multiple semesters to simplify class registration and reduce schedule conflicts

Technology Development Program Intern

Jun 2022 - Aug 2022

Optum | React, Node.js

Minneapolis, MN

- Created a proof of concept web application in a 4-person team for matching acquired entity capabilities to road maps for integration into the United Healthcare ecosystem
- Analyzed sample acquisitions and road maps to formulate a matching algorithm used to save 100s of hours of meetings between solution architects and integration team members

PROJECTS

Health Informations on FHIR | React, Python, PostgreSQL

- Engineered a web application that converts user CSV input into Fast Health Interoperability Resources structured documents, resulting in more efficient patient data turnaround rates between clinics
- Mapped patient data to Social Determinants of Health to guide the Centers for Disease Control and Prevention in choosing target areas of research and assistance

SKILLS

Languages: Java, Javascript, Python, C#, C++, C

Frameworks & Databases: React.js, Node.js, Express, MongoDB, PostgreSQL, Svelte

Concepts: Object Oriented Programming, Data Structures and Algorithms, Scrum Development Process, Unit Testing