

Rian Rahman

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EDUCATION

Georgia Institute of Technology

Bachelor of Science Degree in Computer Science, GPA: 3.88

Atlanta, GA

Expected Graduation: May 2025

EXPERIENCE

HP Inc.

Software Engineer Intern

Fort Collins, CO

May 2023 – Present

- Implementing a browsable graph visualization that enables users to seamlessly comprehend the intricate connections among 20,000+ HP-related API entities spanning across 15 distinct types
- Deploying the graph on the global hp.dev catalog site, which delivers significant time savings for ~7,000 employees by eliminating the need for manual searches of entity relations across multiple catalogs
- Utilizing React, TypeScript, and Highcharts for the dynamic UI and employing GraphQL to query data from HP's API catalog backend
- Leading demos of the visualization to managers during sprints, using Scrum to assess their needs and achieve stakeholder satisfaction

Georgia Institute of Technology's Vertically Integrated Project Program

Atlanta, GA

Research Assistant

January 2022 – December 2022

- Applied TensorFlow, NumPy, and OpenCV to develop an AI-powered facial recognition algorithm for miniature robotic blimps and autonomous underwater vehicles, significantly enhancing their maneuvering capabilities
- Incorporated a Raspberry Pi in the blimp, allowing data parsing from the facial recognition system and secure uploading to an SSH server
- Designed a Python to MATLAB GUI interface that effectively utilized complex deep learning techniques, improving the blimp's pathfinding by 30% in terms of image quality and accuracy of detection
- Facilitated with eight teammates to successfully deploy a blimp that broadcasted a Georgia Tech basketball game to ~1,000 people

NCR Corporation

Atlanta, GA

Software Engineer Intern

May 2022 – August 2022

- Revamped NCR's consumer data with streamlined response/request formats by building robust RESTful APIs in Go and Spring Boot
- Developed an intuitive RBAC configuration dashboard in Next.js for NCR's Business Platform, offering internal management for 60+ million GraphQL APIs utilized by 100+ partner organizations
- Empowered users to edit 50+ templates from NCR's Digital Receipt services by integrating an HTML viewer onto the dashboard
- Transformed complex API data into actionable insights with 16 Chart.js visualizations, allowing performance assessment of top 10 organizations, enterprise units, and endpoints
- Ensured seamless integration and optimal dashboard performance by assisting its deployment on the Google Cloud Platform with GitOps

University of Georgia's Computer Science Department

Athens, GA

Teaching Assistant

June 2021 – December 2021

- Delivered in-depth feedback on weekly Java labs, guiding ~110 students in mastering core programming concepts over two semesters
- Contributed to 12 Java assignment evaluation tools, significantly reducing grading time of student submissions to under three seconds

PROJECTS

NCR Go | React Native, MongoDB, Python, Microsoft Azure, OpenCV

github.com/RiRah123/NCR-Go

- Spearheaded the development of a React Native application with six teammates that leverages computer vision technology to revolutionize the shopping experience by accurately detecting product availability and providing in-store location information
- Connected a neural network to the frontend of the application, optimizing the classification of in-store product images to achieve ~94% accuracy and organizing inventory data in a MongoDB cluster
- Recognized as top 10 of 401 teams for NCR's Global Hackathon and secured a patent by presenting to the Executive Leadership Team

mfChess | React, TypeScript, MongoDB, Google Authenticator, WebSocket

github.com/mfChess

- Collaborated with four teammates to devise mfChess, a deployed React application that enhances the user experience in online chess by implementing faster matchmaking, real-time, in-depth Stockfish-powered analysis, and game-hosting capabilities for 10+ players
- Integrated the site with the WebSocket protocol to efficiently preserve user states and game statistics across 25+ sessions, leading to heightened user collaboration and engagement

EatCode | React, MongoDB, Express.js, TypeScript, Java, Python, Docker

github.com/RiRah123/EatCode

- Engaged with seven teammates to build a software engineering technical training website in React, enabling users to enhance their learning experience in data structures and algorithms with 100+ questions supported in five programming languages
- Configured a MongoDB and Express.js backend system that tracks users' progress over the last 365+ days using their Google account ID, ensuring accurate data storage and retrieval of their problem-solving statistics

TECHNICAL SKILLS

Languages: Java, Python, C, C++, JavaScript, TypeScript, HTML/CSS, SQL, GraphQL

Frameworks/Libraries: React, Next.js, Node.js, React Native, D3.js, Spring Boot, Material UI, NumPy, Pandas, Matplotlib, Beautiful Soup

Developer Tools: Jira, Azure, AWS, Postman, Figma, Linux/Unix, Git, Docker, Kubernetes, MongoDB, Google Cloud, Notion, LaTeX

Concepts: Agile Development Process, Data Structures & Algorithms, RESTful APIs, Human-Computer Interaction, UI Design, Data Visualization, Software Development, Object-oriented Programming, Artificial Intelligence, Cloud Computing, Computer Architecture, UML