

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, enabling users to seamlessly comprehend the intricate connections among 20,000+ HP-related API entities spanning across 15 distinct types
- Deploying the graph to the global hp.dev catalog site, delivering 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 achieving stakeholder satisfaction

Georgia Tech'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, enhancing their maneuver capabilities significantly
- Incorporated a Raspberry Pi in the blimp, providing data parsing from the facial recognition and secure uploading onto an SSH server
- Designed a Python to MATLAB GUI interface that effectively employed complex deep learning techniques, improving the blimp pathfinding by 30% in terms of image quality and accuracy detection
- Facilitated with eight teammates to deploy a blimp that successfully broadcasted a Georgia Tech basketball game to an ~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

UGA'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 semester
- 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 into the front end of the application, optimizing classification of in-store product images to ~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 improves 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 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 interview training website in React, enabling users to enhance their data structures and algorithms learning experience with 100+ questions in five supported programming languages
- Configured a MongoDB and Express.js backend system, tracking users' progress on problem-solving over the last 365+ days using their Google account ID

TECHNICAL SKILLS

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

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

Developer Tools: Jira, Azure, Docker, AWS, Postman, Figma, Linux/Unix, Git, GitHub, Docker, JUnit, Kubernetes, MongoDB, Notion

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