# Rian Rahman

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#### EDUCATION

# Georgia Institute of Technology

Atlanta, GA

Bachelor of Science Degree in Computer Science, GPA: 3.88

Expected Graduation: May 2025

#### Experience

HP Inc.

Fort Collins, CO

May 2023 - Present

Software Engineer Intern

- 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 employed GraphQL to query data from HP's API Catalog backend

#### Georgia Tech's Vertically Integrated Project Program

Atlanta, GA

Research Assistant

January 2022 - December 2022

- Applied TensorFlow, NumPy, and OpenCV to an advanced AI-based face recognition algorithm for miniature robotic blimps and autonomous underwater vehicles
- Constructed robust RESTful APIs using Go and Spring Boot, streamlining the request/response format for NCR consumer data
- Incorporated a Raspberry Pi in the blimp, providing data parsing from the facial recognition and secure uploading onto an SSH server
- Created a Python to MATLAB GUI that applied deep learning to improve a 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 1,000+ people

# **NCR** Corporation

Atlanta, GA

Software Engineer Intern

May 2022 - August 2022

- Streamlined the request/response format for NCR consumer data by building robust RESTful APIs using Go and Spring Boot
- Developed an intuitive RBAC configuration dashboard for NCR's Business Platform in Next.js to display and manage GraphQL API from over 60 million calls made by 100+ partner organizations
- Empowered users to edit 50+ templates from NCR's Digital Receipt services by integrating an HTML viewer onto the dashboard
- Employed Chart.js to visualize data for top 10 organizations, enterprise units, and endpoints, allowing effective performance assessment
- Ensured seamless integration and optimal site performance by assisting in its deployment onto 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

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  $\sim 94\%$  accuracy and organizing inventory data in a MongoDB cluster
- $\bullet \ \ \text{Recognized as top 10 of 401 teams for NCR's Global \ Hackathon \ and \ secured \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ Secured \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ Secured \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ Secured \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ secured \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ secured \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ a \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ Teams \ and \ patent \ by \ presenting \ to \ the \ Executive \ Leadership \ the \$

## 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 improved collaboration and heightened user 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, PyTorch, Matplotlib Developer Tools: Jira, Azure, Docker, AWS, Postman, Figma, Terminal, Git, GitHub, Docker, JUnit, Kubernetes, Helm, MongoDB 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