

# RIAN RAHMAN

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## EDUCATION

### Georgia Institute of Technology

Bachelor of Science Degree in Computer Science, GPA 4.00

Atlanta, Georgia

Expected Graduation: May 2024

## EXPERIENCE

### Georgia Tech's Vertically Integrated Project Program

Research Assistant for RoboSense Project

Atlanta, Georgia

January 2022 - Present

- Encoding an AI-based face recognition algorithm for miniature robotic blimps and autonomous underwater vehicles using TensorFlow, NumPy, and OpenCV
- Incorporating a Raspberry Pi for blimp which parses data from face recognition algorithm and uploads it onto an SSH server
- Creating a Python to MATLAB GUI that remodels a blimp's pathfinding with an improved 30% in image quality and accuracy detection through deep learning techniques
- Facilitating with eight teammates to design a blimp that will broadcast a Georgia Tech basketball game with an attendance of 1,000+ people to a jumbotron

### NCR Corporation

Software Engineer Intern

Atlanta, Georgia

May 2022 - August 2022

- Constructed RESTful APIs using Go and Java Spring Boot, standardizing request/response format for consumer-related data
- Developed an RBAC configuration dashboard for NCR's Business Services Platform, displaying GraphQL API data for 60+ million calls from 100+ partner organizations with Next.js and Material UI
- Extracted and visualized API data in Chart.js for top 10 organizations, enterprise units, and endpoints by total calls
- Embedded dashboard with an HTML viewer, which edits and renders 30+ templates from NCR's Digital Receipt services
- Regularly met with internal managers over four sprints to demo dashboard and assess needs under the Scrum Methodology
- Assisted in the deployment of the dashboard onto Google Cloud Platform using Helm, Kubernetes, and GitOps

### UGA's Franklin College of Arts and Sciences

Teaching Assistant for CSCI 1301 (Intro to Computing & Programming)

Athens, Georgia

June 2021 - December 2021

- Provided feedback on weekly Java labs related to fundamental programming techniques for ~120 students over two semesters
- Contributed to 12 Java assignment evaluation tools that would automate the grading of student submission in under 5 seconds

## PROJECTS

### MeatCode (Ongoing) | React, MongoDB, Express.js, TypeScript, Python, Docker

github.com/eatcode-gt/eatcodeweb

- Engaging with seven teammates to develop a LeetCode clone in React, where 2,000+ algorithmic and data structures-styled questions are rephrased in terms of meat ingredients and products
- Configuring website to a MongoDB and Express.js back-end system that tracks user progress with their Google account ID

### HackGT 9 - Audur | Flask, AWS, Amazon EC2, HTML, CSS

github.com/RiRah123/Audur

- Collaborated with three teammates to establish an Imgur clone under 36 hours that generates a secure and anonymous shareable link for a user-uploaded audio file using the TinyURL API
- Leveraged Flask as the back-end, resulting in 100+ audio files to be stored on an Amazon EC2 instance with a unique ID

### NCR Global Hackathon - NCR Go | React Native, MongoDB, Python, Microsoft Azure

github.com/RiRah123/NCR-Go

- Built a React Native application with six teammates to provide an efficient shopping solution for customers, where a product's availability and in-store location are detected using computer vision technology
- Connected the front end of the application with a conventional neural network that classifies images of in-store products with ~94% accuracy and stores relevant inventory data into a MongoDB cluster
- Won top 10 out of 401 teams (4,800+ participants) with project patented and presented to NCR's Executive Leadership Team

### UNIX Terminal Shell | C

github.com/RiRah123/UNIX-Terminal-Shell

- Implemented a shell in C that interprets and executes 25+ user-entered UNIX commands, including cd, wc, history, and exit
- Applied background/foreground job control, pipelining, and IO redirection for commands through Linux Kernel system calls

## AWARDS

5th Place Computer Network Design Event - FBLA National Leadership Conference, Business Case Study Competition - July 2020

## SKILLS

**Languages:** Java (Proficient), Python (Intermediate), C/C++ (Intermediate), JavaScript (Intermediate), TypeScript (Intermediate)

**Frameworks & Libraries:** React, Material UI, Next.js, React Native, Chart.js, JavaFX, Spring Boot

**Developer Tools:** Jira, Postman, Figma, Terminal, Valgrind, Emacs, Git, GitHub

**Concepts:** Agile Development Process, Data Structures & Algorithms, RESTful APIs, Human-Computer Interaction, UI Design, Data Visualization, Software Development, Object-oriented Programming, Systems Programming, Automata Theory, Computer Law