

RIAN RAHMAN

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EDUCATION

Georgia Institute of Technology

Bachelor of Science Degree in Computational Media, 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 assignment evaluation tools written in Java that would automate the grading of student submission

PROJECTS

MeatCode | React, MongoDB, Express.js, TypeScript

Ongoing

- 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 application to a MongoDB and Express.js backend system that tracks user progress with their Google account 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 system calls with the Linux Kernel

iTunes Search API Application | Java, JavaFX

github.com/RiRah123/iTunes-Search-API-App

- Established a JavaFX GUI application, which displays a gallery of 20+ relevant album covers by sending a user-entered search query to the iTunes Search API and parsing its JSON response
- Integrated application with a play mode that randomly replaces an image on-screen with one in the backend every 3 seconds

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