# **Rudresh Patel**

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www.rudresh.dev

#### **EDUCATION**

#### **B.S. Computer Science**, Georgia Institute of Technology

JAN 2020 — DEC 2023

LinkedIn: rudreshpatel28

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#### SKILLS

Programming Languages: JAVA, Python, C, GoLang, JavaScript, SQL, ARM Assembly, MIPS Assembly, HTML

Technologies:Kafka, Docker, Kubernetes, AWS, Git, Jenkins, GENESYS, Grafana, LaTeX, JIRA, RESTful APIFrameworks:Spring-boot, Django, Flask, MongoDB, React, Tailwind, CSS, HBase, Hadoop, Cucumber, MockitoExperiences:Agile, Distributed Systems, API Development, Backend, Full Stack, Big Data, Data Structures, Databases

#### **WORK EXPERIENCE**

## **Software Engineering Intern**

JUN 2022 — AUG 2022

JP Morgan Chase & Co.

Wilmington, DE

- Developed a utility service application to automate firm's back-office environment testing which handles approximately 1 million work-item requests per day
- Increased operational efficiency by saving approximately 18 work hours every 10 days by incorporating utility service into the back-office environment
- Utilized Cucumber testing framework to run tests and Spring-boot framework to develop controllers, cache-able services, repositories and configurations. Also, created and edited tables with SQL, and used Grafana to display work-item test results infographics
- Deployed utility service to the firm's Kubernetes Platform to make the application scalable and easily transferable to other environments

## Algorithm Development (Team Lead)

**AUG 2021 — MAY 2022** 

Vertically Integrated Projects - The Robot Collective (Georgia Institute of Technology)

Atlanta, GA

- Implemented multi-agent path finding algorithm for zumo-bots which enabled bots to reach their goals without collision
- Increased efficiency of the path finding algorithm by 7 percent by developing custom heuristic for A\* algorithm
- Established continuous data exchange and communication between Algorithm project and hardware project using Sockets and flask
- · Organized weekly status and update meetings for each sub-team for the Python-algorithm team

### **Software Engineering Intern**

JUN 2021 — AUG 2021

JP Morgan Chase & Co.

Remote

- Developed a full-stack application to automate trading reports generation from the Big Data platform. The application enables business users to construct their queries, check their status, and download the report upon completion
- Increased efficiency in response time of report generation and download from 3 hours to 11 minutes by enabling business users to download customized trading reports themselves instead of contacting the data team
- Built a React front-end application and a Spring-Boot micro-service which handled the formatting, submitting, and interacting with the Big Data environment. Used Kafka to produce and consume streamed data, and HBase to store and read queries
- Constructed unit, integration, and end-to-end tests to discover a lapse in the application and take appropriate measures to rectify it

## Tutor - CS, Math, Physics

JAN 2019 — DEC 2019

Georgia State University

Alpharetta, GA

- Tutored students in Computer Science, Math (up to calculus 2) and Physics
- Conducted tutoring sessions for introduction to programming and object-oriented programming and developed study plans with students to re-enforce recently learned CS and Math concepts

#### **PROJECTS**

#### GameBoy Advance - Brick Breaker | C

**MARCH 2021** 

- Developed classic Brick Breaker, a fully functional Gameboy Advance Game, using C.
- Created a fully functional game with five lives, with certain win and lose conditions, animations and multiple screens.

## FARMLAND group project (Team Lead) | JAVA, JavaFx

AUG 2020 — NOV 2020

- Developed a JavaFX based farming game
- · Used Git as a version control system to coordinate among group members and to track changes
- Assigned tasks to other members, and constructed tests using JUnits and TestFX

### Pet Appointment update system | JAVA

MAY 2020

- Created an appointment management system to generate and update CSV report with name, day, entry and exit time, the purpose of visit, health observation.
- Utilized Object Oriented Programming principles for security and scalability of the application.