Rishi Barad

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EDUCATION

UNIVERSITY OF MICHIGAN **Ann Arbor, MI**
B.S. Computer Science, B.S. Neuroscience May 2021
Coursework: GPA: 3.3/4.0
Data Structures & Algorithms, Object-Oriented Programming, Computer Security, Computer Vision, Web Systems, Mobile Apps, Software Engineering

SKILLS

C++, **Python**, JavaScript (TypeScript, React, Node), SQL, Go, Java, Swift, AWS, Kubernetes, CI/CD, Agile

EXPERIENCE

Software Engineer Intern | Alloy Automation October 2020 – December 2020

- Worked cross-functionally with Engineering and QA teams in CI/CD pipeline, supporting workflow automation for Shopify and BigCommerce services, writing various API endpoints, and developing automated test frameworks at both end-user and backend levels

Full Stack Web Developer | Freelance July 2020 – August 2020

- Developed websites for 2 student organizations using React, HTML, CSS, and Bootstrap in conjunction with automated chat features

Research Assistant | Michigan Medicine October 2016 – July 2019

- Spearheaded 3-year pilot study examining impact of tDCS (a low-current form of neuromodulation) on recovery from aphasia (a brain disorder) with guidance from Dr. Carol Persad
- Invited to present results at Harvard's National Collegiate Research Conference

PROJECTS

Optical Music Recognition

- Created program that converts image of sheet music to instrumental audio track utilizing image pre-processing, music symbol extraction via deep-learning model, and data post-processing to produce audio
- Applied Agile Scrum techniques to optimize project cycle

Market Genie

- Built Amazon Alexa Skill that helps investors get real-time stock prices and track watchlist performance with voice commands
- Developed backend using AWS Lambda in conjunction with NoSQL database (DynamoDB)

Instagram Clone

- Implemented REST API with Flask and utilized React to generate fully functioning Instagram clone deployed using AWS
- Built scalable, interactive web app with client-side scripting features, such as infinite scroll, navigation history, commenting and liking

Map Reduce (Hadoop)

- Implemented Map Reduce programming model in Python to simulate distributed computing of big data
- Utilized threads, processes, and sockets to mimic concurrent communication between nodes

ACTIVITIES

Michigan Hackers

- Integrated backend infrastructure for iOS Fitness Tracker app utilizing Google's Firebase platform

JPMorgan Chase Virtual Experience Participant

- Participated in open access 2020 JPMorgan Chase Virtual Experience hosted by Forage
- Created chart to display stock price data feed for trader's dashboard using Python for backend along with React and Chase's open source frameworks for frontend experience

Google Foobar

- Participating in Google's invitation-based challenges: In Progress, Level 3