Rohan Erasala

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WORK EXPERIENCE

AMAZON   **MAY 2022 – AUG 2022**
Software Development Engineering Intern   **Seattle, WA**

- Created a serverless, native AWS web application to track employee schedules using the AWS Cloud Development Kit
- Designed a NoSQL database with DynamoDB capable of efficiently scaling up to 90,000 users across 22 availability zones, and performed CRUD operations with 4 custom GraphQL resolvers and AWS Lambdas to read/modify entries
- Secured all endpoints with AWS Identity Access Management and Midway to keep application strictly for internal use
- Built frontend using Typescript + React.js and conducted user research to verify customer usability of interfaces

FORD MOTOR COMPANY   **MAY 2021 – JUL 2021**
Software Engineering Intern   **Dearborn, MI**

- Designed and developed a full stack web application to monitor the health of 25 servers on Ford GSPAS Database with 3 other developers, utilizing Figma for user interface design and prototyping, and HTML5, CSS3, and Perl for development
- Tested stability of interfaces and automated 4 processes using Java and Selenium, reducing testing time by 24%
- Implemented 2 REST APIs to store data and created exception handling protocol for internal Spring Boot application
- Facilitated a team of 5 other interns in the Ford IT Intern Innovation Challenge to compose a Zipcar-style application that allow users to rent Ford electric vehicles, and spearheaded the creation of the prototype for this service in Figma

PROJECTS

- **Stock Index Value Predictor:** Scraped 100 stock tickers with BeautifulSoup and passed into trading API to get historical pricing data. Stored data in SQLite databases and ran regression analysis of stock prices against stock indicators including unemployment rates and gas prices to determine possible correlations. Displayed findings in graphs with Matplotlib.
- **Video Game Recommender System:** Collaborated with a team of five members to develop a content-filtering-based recommender system for video games. Calculated the cosine similarity between game descriptions and incorporated additional attributes, such as Metacritic scores, sales figures, and Steam tags, into a customized recommendation scoring system. Utilized recommendations derived from BERT word embeddings of the game descriptions.

SKILLS

- **Back-end:** C++, Java, Python
- **Database Management:** AWS DynamoDB, SQL, MySQL
- **API Design:** AWS Lambda, API Gateway
- **Web Development:** HTML, CSS, Bootstrap, React.js, Typescript
- **UX Design:** Figma, Adobe Creative Suite, Sketch, wireframing, prototyping, heuristic evaluations, user research
- **Interests:** 15+ years of experience playing the guitar, LEGO collector and enthusiast, avid football, and basketball fan

EDUCATION

UNIVERSITY OF MICHIGAN, COLLEGE OF ENGINEERING   **SEP 2019 - MAY 2023**
B.S.E Computer Science   **Ann Arbor, MI**

- **GPA:** 3.74/4.0
- **Relevant Coursework:** Software Engineering, Information Retrieval, Artificial Intelligence, Computer Security
- **Organizations:** Kappa Theta Pi – Professional Technology Fraternity (Vice President of Professional Development)