DEXSON JOHN D'SOUZA

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TECHNICAL SKILLS

Languages: Java, Python, Javascript, Scala, C/C++.

Frameworks: Node.js, Angular 8, Express, Kafka, Spark, Spring, Maven, React, GCP.

Others: JSON, AWS(EC2, S3, Lambda, Gateway), Git version control, PostgreSQL, Cassandra, Visual Studio.

EDUCATION

Masters of Science in Computer Science, Expected February 2023, GPA 3.9/4

University at Buffalo. The State University of New York

 Algorithms Design and Analysis, Operating System, Machine Learning, Algorithms for Distributed Systems, Project Development, Modern Networking Concepts, Intro to Distributed Systems.

Bachelors of Engineering in Information Technology, May 2019, GPA 3.6/4

Mumbai University

 Object Oriented Programming(OOP), Software Engineering, Automata Theory, Data Mining, Soft Computing, Intelligent Systems, Image Processing, Computer Networks.

EXPERIENCE

SDE III Intern, Walmart Global Tech, Arkansas, May 2022 - Present

- Designed and developed a distributed stream processing platform using Apache Kafka to extract changes from Walmart Locations Database efficiently
- Developed scalable Spark job using Java to read data from Kafka topics into the Google Cloud
- Created unit test cases and deployed in production for 400+ applications

Research Aide, SUNY RF, Buffalo, New York, September 2021 - May 2022

- Created an Isomap of metalloids using geodesic distances of compounds generated using Matlab
- Implemented a functionality to develop rankings of 25 metallic elements for a variety of randomly generated inputs using adjacency matrix and mathematical equations
- Generated correlation of elements with respect to Yield Strength and Ductility of 350 metalloids. Created scatter plot and line graphs to display % increase in properties of each metal in different temperature range

Software Developer, Infinite Computing Systems, Mumbai, July 2019 - July 2021

- Collaborated with 4 teams to create, optimize and maintain several frontend modules in 7 web applications and 3 mobile applications using Angular 8, Node is and SQL
- Managed a Career portal web application and executed several functionalities in the front end using Angular 8 and React
- Developed a robust backend script to implement Dynamic forms using Javascript and JSON
- Introduced a new option for tracking and locating 100's of work orders using Bing Maps

PROJECTS

Anastocare

- Managed a team of 5 members to develop a Web application and Apple Watch application to support
 patients possessing the danger of anastomotic leak using Java Spring, Maveb, Postgres, AWS EC2 and S3.
- Devised APIs to extract watch data from Firebase Database using Java
- Used Angular 9 to create UI for patients, admins and global admins to display health reports

Stock Market Trading using Deep Reinforcement Learning

- Prototyped a Model leveraging Reinforcement Learning to perform trading on nvidia-2016.1 data
- Formulated an environment to perform Q-learning consisting of 4 states and 3 steps required for Q-learning
- RL Model was able to study trends & patterns and build a trade strategy to augment account value by 40%

Pintos Operating System

- Constructed Alarm Clock System, Priority Scheduler with the implementation of priority donation to improve performance of thread in Linux-kernel covering 45 test cases
- Added a strategy to prevent deadlocks using semaphore and locks
- Implemented 10 System calls and Process management to execute User programs in Linux environment