Madhuri Palanivelu

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WORK EXPERIENCE

Goldman Sachs, Salt Lake City, UT   Jul 2021 - present
Software Engineer, Storage
- Developed a web application for Block Storage from scratch, using **Angular** and **Node.js**
    - Engineered the web app to handle all block storage provision, increase and decommission requests made for clients across the entire firm
    - Developed 20+ components, templates, interfaces, and services that consume internal APIs, from scratch
    - Built 10+ Reactive forms with validation, dynamic fields, and grids that enable storage tasks
    - Wrote 50+ Karma/Jasmine unit tests for all the services and routes created for the application
    - Scripted a CI/CD pipeline to continuously build, test, and deploy the app in Dev, QA, and Prod hosts
    - Improved the web app iteratively by discussing design decisions and wireframes with stakeholders
    - Increased efficiency of the team by saving an hour of collective developer time per day

- Initiated the use of **Ansible** and **Python** to automate the Block Array Onboarding process within the team
    - Developed an automated plugin that creates and maintains a dynamic inventory of servers
    - Deployed the automation framework on a Kubernetes cluster for the entire Storage team
    - Built Ansible modules to automate checking and setting configurations on vendor block arrays
    - Eliminated manual developer effort and sped up the array onboarding process by a factor of 5

- Created a test suite for performance regression testing of GS Object Storage, using the **COSBench** benchmarking tool
    - Created 20+ workloads to identify performance regressions before and after software and hardware code upgrades
    - Increased the object storage service CPU and Network utilization by 20% through optimal workload parameters

Infosys Ltd, Mysore, India   Dec 2018 - Apr 2019
Systems Engineer Intern
- Developed an Employee portal backend for communicating with the security personnel of the Infosys campus using **Spring**, Hibernate, and **Java**

EDUCATION

Northeastern University   May 2021
Master of Science in Computer Science, GPA 3.9 / 4.0

Amrita Vishwa Vidyapeetham   Jun 2019
Bachelor of Technology in Computer Science and Engineering

TECHNICAL SKILLS

Programming Languages:	Python, Java, JavaScript
Web Technologies:	Angular, React, Node.js, HTML, CSS, Flask, Spring
Software/Tools:	Ansible, Git, Kubernetes, Docker, Figma
Database:	MongoDB, Elasticsearch, MySQL, Firebase

PROJECTS

Chore Tracker   Mar 2021
- Engineered a high-fidelity interactive prototype that can gamify the process of completing chores and reduce tension between cohabitants
- Developed the application with **Node.js**, **React**, and **Redux**
- Performed requirement analysis, user interviews, prototyping, and reiterated interface design with a team of three

MasterChef Recipe Selector   Dec 2020
- Led a team of three to build a Heroku-based web app that recommends recipes and allows users to search for recipes
- Developed the application using **MongoDB**, Express.js, **React**, **Node.js** (MERN), and the Food.com dataset
- Created the recommendation system based on user's selections of their available ingredients, cuisine, and type of meal

ACHIEVEMENTS

- CarbonHack22 - Developed a solution to minimize the carbon footprint of servers by distributing the execution of tasks based on clean and dirty energy cycles