MADHURI PALANIVELU

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Experience

Goldman Sachs   **Jul 2021 − present**
Software Engineer, Storage   *Salt Lake City, UT*

- Developed a web application for Block Storage from scratch, using **Angular** and **Node.js**
  - ∗ Engineered the app to handle all storage provision, increase and decommission requests made across the entire firm
  - ∗ Developed 20+ components, templates, interfaces, and services that consume internal GS APIs
  - ∗ 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 1 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
  - ∗ Uploaded results into **Elasticsearch** and created a **Kibana** dashboard to visualize changes in the configurations
  - ∗ Eliminated manual developer effort and sped up the array onboarding process by 2 hours

- 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   **Dec 2018 − Apr 2019**
Systems Engineer Intern   *Mysore, India*

- Developed an Employee portal back-end for communicating with the security personnel of the Infosys campus using **Spring**, **Hibernate**, and **Java**

Technical Skills

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

Education

Northeastern University   **June 2021**
Master of Science in Computer Science, GPA: 3.9   *San Jose, CA*
Amrita Vishwa Vidyapeetham   **May 2019**
Bachelor of Technology in Computer Science   *Coimbatore, India*

Projects

ChoreChaser - Code | *Node.js, JavaScript, React, Redux, HTML, CSS*   **2021**

- Engineered a high-fidelity interactive prototype that gamifies the process of completing chores amongst 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 - Website | Code | *Node.js, JavaScript, React, MongoDB, HTML, CSS*   **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