ROHITH SATHIAMOORTHY PANDIAN

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Education

University of California San Diego — **California, US**
Master of Science in Computer Science (CGPA: 4.0/4.0) — Sep 2022 - Mar 2024
Coursework: Graduate Networked Systems, Algorithm Design & Analysis, Search & Optimization, AI - Probabilistic Reasoning & Decision Making, Recommender Systems & Web Mining, Unsupervised Learning, Stat NLP, Biomedical NLP

PSG College of Technology, Anna University — **Coimbatore, India**
Bachelor of Engineering in Robotics and Automation (CGPA: 9.91/10.0) — Jul 2016 - Sep 2020
University Rank: 1 (Best Outgoing Student, Gold Medallist)

Technical Skills

- **Languages**: JavaScript, Python, Golang, TypeScript, HTML and CSS, SQL, JAVA, C, C++, PowerShell
- **Frameworks**: Node.js, React, Redux, REST, MongoDB, Sass, D3.js, Scikit, PyTorch, Pandas, Tensorflow
- **Tools**: Docker, GIT, JIRA, gRPC, Tableau, Kubernetes, Jupyter, ELK, Postman, Jest
- **Platforms**: Windows, Linux, AWS Lambda, Google Cloud Run, IIS Web Server

Professional Experience

Dolby Laboratories | Cloud Processing Engineer Intern — **Jun 2023 - Sep 2023**

- Responsibilities: Cloud Research, Software Profiling, Serverless Compute
- Developed a system that automatically identifies the most cost and performance effective parameters for serverless compute of real-world cloud usage scenarios on AWS Lambda and GCP Cloud Run Service.
- The research focused on maximizing performance while ensuring low operational costs by optimizing critical settings such as Memory Size and Number of CPU's. This is achieved by analyzing for patterns from data to strategically find the best parameters by performing a binary search-based profiling.
- The result will also include configurations with lowest cost and highest performance for use cases such as streaming for a big game night when performance is of priority.

Ramco Systems | Analyst Programmer - New Initiatives — **Nov 2020 - Jun 2022**

- Responsibilities: Full Stack Development, API Integration, Distributed Systems, Data Science
- Led development of a semi-automated customer support system for creating tickets from the Ramco Core Software, improving fix generation for support teams. The system reduced overall the Service Level Agreement by 30%, improved customer self-service and is currently live for over 60 customers.
- Maintained and supported end-to-end development, testing, deployment, and support of the frontend and backend application while collaborating with the product manager, UX designer, and solution architect to ensure product standards, optimal performance and user experience.
- Developed a module to dynamically suggest help content based on the Product Business Component, Screen Context, and User Issue Summary from the company documentation site using Solr Search.
- Integrated system logs to elastic and designed Kibana dashboards to monitor performance & user metrics.
- Built 25+ and reviewed 40+ React UI components for the Ramco Low Code Platform.
- Designed a scheduler to sync time bookings of the employees from JIRA and Wrike to the internal timesheet application to facilitate tracking the effort spent on various projects and support activities.

Projects

File Storage Server Implementation | *Golang and gRPC*

- Implemented a scalable and fault tolerant file storage server application that syncs across multiple clients (like DropBox) using Consistent Hashing and RAFT protocol.

Pathfinding and Maze Algorithms Visualizer | *React, Web Development and Graph Traversal* — **Project** | **Code**

- Built a react based static web page to visualize Path finding (Dijkstra's, A*, Bidirectional Greedy, Breadth-First) and Maze Generation Algorithms (Recursive Division, Vertical Division, Random Maze).

Wordle Bot | *Python, Algorithms and Data Structures* — **Code** | **Report**

- Created an algorithmic system that utilized various heuristics to solve the online Wordle game in an average of only five guesses and an evaluation bot for validating the player bot.