






# 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, AI - Probabilistic Reasoning & Decision Making, Search & Optimization, 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 Medalist)

## Technical Skills

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

## Professional Experience

### Dolby Laboratories | Cloud Processing Engineer Intern | California, US

Jun 2023 - Sep 2023

- Responsibilities: Cloud Research, Software Profiling, Deep Learning, ML Engineering, 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.
- Research on optimizing critical settings such as Memory Size and Number of CPUs to maximize performance while ensuring low operational costs by analyzing for patterns from data to strategically find the best parameters by performing a binary search-based profiling.
- Designed and implemented an end-to-end ML engineering pipeline that includes data profiling using Node.js on AWS Lambda, automated model training in Python, and real-time predictions through a Node.js API.

### Ramco Systems | Analyst Programmer - New Initiatives | Chennai, India

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 public cloud, private cloud and on-prem 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 Screen Context Details.
- 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.