






# 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 - Jun 2024

*Coursework:* Graduate Networked Systems, Algorithm Design and Analysis, Search and Optimization, AI - Probabilistic Reasoning and Decision Making, Recommender Systems and Web Mining, Biomedical Natural Language Processing

### 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:** Python, JavaScript, TypeScript, Golang, JAVA, C, C++, HTML and CSS, SQL, PowerShell
- **Frameworks:** Node.js, React, Redux, REST, Tensorflow, Scikit, MongoDB, D3.js, Keras, Pandas, NLTK
- **Tools:** JIRA, GIT, Tableau, gRPC, Jupyter, Elastic, Kibana, Logstash, Postman, Jest, Docker
- **Platforms:** Windows, Linux, IIS Web Server, Microsoft SQL Server, Arduino, Raspberry

## Professional Experience

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

Nov 2020 - Jun 2022

- Responsibilities: Full Stack Development, Data Science, API Integration, Distributed Systems
- 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.
- Implemented a classification model for Ticket Type and Sub-type prediction using Supervised Machine Learning and later improvised using BERT Transformer Model and achieved an accuracy of 86%.
- Automated the deployment pipeline for the system to scale feature release for 40+ public cloud customers.
- 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 | 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).

### Representation Learning for Sepsis Prediction | Deep Learning and Natural Language Processing

[Code](#)

- Utilized Deep Learning Models (CNN and LSTM) to predict sepsis in patients admitted to the ICU based on MIMIC-IV chest X-ray reports and clinical reports. Improved performance by incorporating a 200D PubMed Word2Vec embedding, resulting in a positive predictive value of 80%).

### Wordle Bot | Python, Algorithms and Data Structures

[Code](#) | [Report](#)

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