# ROHITH SATHIAMOORTHY PANDIAN

# EDUCATION

# University of California San Diego

California, US

Master of Science in Computer Science (CGPA: 4.0/4.0)

Sep 2022 - Jun 2024

Coursework: AI - Probabilistic Reasoning and Decision Making, Recommender Systems, Networked Systems, Algorithm Design and Analysis, Biomedical NLP, Search and Optimization

## **PSG** College of Technology

Coimbatore, India

Jul 2016 - Sep 2020

Bachelor of Engineering in Robotics and Automation

CGPA: 9.91/10.0, University Rank: 1 (Best Outgoing Student, Gold Medallist)

Coursework: Programming in Python and C, Problem Solving, Data Structures and Algorithms, AI for Robotics, Vision Systems

#### TECHNICAL SKILLS

• Languages: Python, JavaScript/TypeScript, C, C++, JAVA, HTML and CSS, SQL, PowerShell

• Frameworks/Libraries: NodeJS, React, Tensorflow, Scikit, Keras, Pandas, Redux, MongoDB, NLTK

• Tools: JIRA, Tableau, GIT, ELK, Minitab, MATLAB, DB4S

• Platforms: Windows, Linux, Arduino, Raspberry

EXPERIENCE

Ramco Systems Chennai, India

Analyst Programmer - New Initiatives

Nov 2020 - Jun 2022

- Skills: Full Stack Development, Data Science, API Integration, Distributed Systems, Deployment Automation
- Spearheaded the development of customer support system for ticket creation to ease fix generation for support teams. Client application (React and Node.JS) communicates with the Ramco Software, Identity Server and a centralized server connected to JIRA, Documentation Tool (XWiki) and MongoDB. The system helped reduce the overall Service-Level Agreement by 30%, improved customer self-service and is currently in live for 60+ customers.
- Automated the deployment pipeline for the system to scale feature release for 40+ public cloud customers.
- Integrated UI and server logs to elastic and designed dashboards in Kibana to monitor performance & usage 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%.
- 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.
- Built 25+ and reviewed 40+ UI components for the Ramco Low Code Platform.
- Designed and developed a scheduler to sync time bookings of 300+ employees from JIRA and Wrike to the internal timesheet application to facilitate tracking the effort spent in hours on various projects and support activities.

## **PROJECTS**

### Pathfinding and Maze Algorithms Visualizer | Web Development and Graph Traversal

 ${\bf Project} \mid {\bf Code}$ 

• 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).

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

 $\mathbf{Code}$ 

• Employed Deep Learning Models (CNN and LSTM) to predict Sepsis using the MIMIC-IV chest X-ray structured reports of patients admitted to the ICU (Achieved PPV of 73%). Further, improvised the model's performance by using a 200D PubMed Word2Vec embedding of their clinical reports (Increased PPV to 80%).

#### Understanding the interplay between rating and category in Google Local Reviews | Recommendation

 $\mathbf{Code}$ 

• Experimented on how information from multiple points of interests such as restaurant information, GPS, user review sentiments could contribute to the task of rating prediction and suggesting personalized cuisines. The proposed strategy excibits less than 11% inaccuracy in the prediction experiments on the Google local reviews dataset.

#### Sorting Algorithms Visualizer | Python, PyGame

 ${f Project} \mid {f Code}$ 

• Developed a graphical user interface to visualize sorting algorithms (Quick, Bubble, Tim, Heap, Radix Sort, etc).

### ACHIEVEMENTS AND CERTIFICATIONS

- Won THINK o FEST Hackathon (Title: Automation in Fuel Loading) conducted by Dover India Innovation Centre.
- Received Ramanujan Award for having stood first among all undergrad students in the mathematical ability test.
- Coursera: Machine Learning (Stanford), Data Science (IBM), Python (University of Michigan), Java Programming and Software Engineering (Duke University) | Tableau: Desktop Advanced, Author and Analyst Badge.