

# Ramyalakshmi Sundaramoorthy

623-281-6909 | rsunda15@asu.edu | linkedin.com/in/ramyalakshmi-s

## EDUCATION

### Master of Science in Computer Science

Arizona State University, Tempe, AZ

Coursework : Foundation of Algorithm, Distributed Database Systems, Data Mining, Software Testing, Machine Learning.

Expected December 2024

CGPA 4.0/4.0

### Bachelor of Technology in Computer Science and Engineering

Amrita Vishwa Vidyapeetham, Bangalore, India

Coursework : Data Structures, Algorithms, Object Oriented, Software Engineering, Database Management, Computer Networks

June 2019

CGPA 8.66/10

## TECHNICAL SKILLS

**Programming Languages:** Java, Python, C/C++, JavaScript.

**Backend and Frontend:** Spring Boot, React, Django, Maven, HTML, CSS, Node.js

**Tools and Technologies:** Docker, AWS (EC2, RDS, IAM, DynamoDB, CloudWatch), Elasticsearch, Redis, Apache Kafka, Git, GitHub, Jenkins, Gradle, RDBMS, SQL, NoSQL, MySQL, PL/SQL PostgreSQL, MongoDB, Docker, Android, Map Reduce.

**Others:** RESTful API, Confluence, JIRA, Microservices, Web services, SonarQube, Splunk, Design patterns, Windows, MacOS, Linux/Unix.

## PROFESSIONAL EXPERIENCE

### Thermo Fisher Scientific

#### Software Engineer II

Bangalore, India

October 2021 - December 2022

- Led backend implementation for Exodus project, driving \$3M revenue in 2 months.
- Enhanced system efficiency by integrating AWS SQS, SNS, and S3 into the Order Tracking System, improving performance by 20%.
- Conducted architectural assessments, designed, and implemented user-centric software applications using Java/J2EE Spring Boot.
- Migrated applications from AWS ECS to EKS and optimized AWS resource costs, resulted in 12% cost savings.
- Owned end-to-end database lifecycle, encompassed design, implementation, and maintenance in PostgreSQL for Applications.
- Managed and oversaw CI/CD pipelines, performed pull requests, code reviews, and executed load, unit, and integration testing.
- Ensured maintenance of applications, optimization in alignment with AWS best practices, and container methodologies.

### Thermo Fisher Scientific

#### Software Engineer I

Bangalore, India

July 2019 - October 2021

- Owned the analysis, implementation, and ongoing maintenance of the Rules and SKUs engine, reducing project costs by round 9%.
- Developed Spring Boot applications with secure and highly reusable REST APIs, unit tests (JUnit), achieving 80% code coverage.
- Automated deployment, code quality using SonarQube and security scans in Jenkins reduced costs by ~8% for the organization.
- Led the migration of Jenkins and mentored junior team members, fostering skill development and knowledge sharing.
- Designed and implemented metrics dashboards in Splunk to monitor applications and collaborated within SAFe Agile SDLC.

### Honeywell

#### Intern

Bangalore, India

February 2019 - June 2019

- Created a Python Django-based tool for ECR Cycle time prediction, incorporating various machine learning algorithms and an intuitive graphical user interface GUI for data upload, model execution, and comparative analysis of model outcomes.

## ACADEMIC PROJECTS

### ContentSwift CDN

A content delivery network (CDN) using Python. Includes implementing caching for improved performance, security measures, and real-time monitoring. Used Kubernetes and deployed MongoDB and PostgreSQL for data management(sharing and partitioning).

### Spring Boot Kafka Project

Demonstrated Apache Kafka and Zookeeper setup in docker, integrated with a Spring Boot application to publish and consume messages.

### BeTheBestYou - A wellness tracking App

The Guardian Angel Android app is a holistic well-being solution, combining physical health, mental health, and personal goals, featuring anomaly detection, recommendations for nearby medical facilities, and emergency contact initiation in critical situations.

### ML Tool to predict common diseases based on symptoms

Created a predictive tool for common diseases from symptoms, utilizing web scraping to extract medical data from relevant websites and building an 86% accurate ML model using Python, NLP, NLTK, and Scikit-learn.

### Zomato clone (Food delivery website)

Crafted and developed a ReactJS project for a food delivery application, designed to clone functionalities of Zomato.

### Sentiment Analysis

Engineered a sentiment analysis tool employing TensorFlow and deep neural networks, trained on a dataset of 40k positive and negative sentences, achieving an impressive 89% accuracy. Leveraged expertise in Python, TensorFlow, NLTK, and Django for project development.

## ACHIEVEMENTS AND CERTIFICATIONS

- Awarded 'You Made a Difference' in Q2 2021 from Thermo Fisher Scientific for leading Rules and Skus Engine implementation.
- CERTIFICATION - Codechef Certified Data Structures and Algorithms Programme - CCDSAP.
- ICPC regionals in 2017 Asia Amritapuri double site regional contest, 104<sup>th</sup> position.
- Won 8<sup>th</sup> position in the India x Russia boot camp by ACM ICPC and Codeforces.