

NEHA THOMAS

Los Angeles | (425) 504-2934 | nehathom@usc.edu | [linkedin.com/in/nehathom](https://www.linkedin.com/in/nehathom) | github.com/nehathom | nehathom.github.io/portfolio

EDUCATION

University of Southern California

Master of Science, Computer Science

Aug 2025 - May 2027

Los Angeles, CA

Rajagiri School of Engineering & Technology

Bachelor of Technology, Information Technology

Nov. 2021 - May 2025

Kerala, India

GPA: 9.47/10

SKILLS

Programming: Python, R, C, Java, JavaScript, HTML/CSS
Web frameworks: React, Node, Express, Flask, RESTful APIs, Figma, React Native, UI, UX
Database: MongoDB, MySQL, PostgreSQL, SQLite, Tableau, Pandas, NumPy, NoSQL
AI & ML: Deep Learning, TensorFlow, Keras, PyTorch, Neural Networks, Scikit, XAI
Relevant Courses: Database Management, Operating Systems, Web Application Development, Data Analytics, Artificial Intelligence, Cryptography and Network Security, Computer Vision, Internet of Things, Soft Computing

WORK EXPERIENCE

NeST Digital

Oct. 2023 - Oct. 2023

Internship Trainee

Kerala, India

- Wrote and debugged Python scripts for three development tasks focused on file handling and user input.
- Refactored code into modular components and enhanced clarity based on mentor and team feedback.
- Collaborated within a 6-member team to present a group project, contributing to design discussions and implementation decisions.

PROJECTS AND PUBLICATIONS

MALDROID – Android Malware Detection System

Sept. 2024-May 2025

Technologies: Android, HTML, CSS, JavaScript, Python, TensorFlow, XAI

- Trained malware classifier on 5,000 APK files; achieved 91.2% test accuracy.
- Created LIME-based visualization to show what code segments triggered malware classification.
- Frontend allowed users to upload and scan APKs; tested with 120 samples in demo.
- Project paper accepted at ACCTHPA 2025 Conference.

SPACEUP – Real-Time Parking Management System

Jan. 2024 - May 2024

Technologies: MongoDB, Express, React, Node.js, HTML, CSS, JavaScript (MERN Stack)

- Built a web app to track 30+ campus parking slots using MongoDB and React.
- Added authentication for 2 roles (admin, user) and live status updates using polling at 5-second intervals.
- Reduced test conflict cases from 18 to 3 per day during simulated usage.

SUPPLY MANAGEMENT – Queueing-Based Parcel Packing Optimizer

Jan. 2025 - May 2025

Technologies: Python, Flask, HTML, CSS, JavaScript

- Simulated 4 queueing strategies for parcel packing using real-time data from CSV files.
- Output showed a 28–32% increase in throughput compared to baseline FIFO model.
- Dashboard visualized queue lengths and idle time.
- Tested across 5 different warehouse sizes (20 to 100 workers) with configurable input rates.

CERTIFICATIONS

- NPTEL Certifications: Python for Data Science, Cloud Computing, Computer Networks and Internet Protocol