

SANTHOSH G

+91 9566900696 | santhoshgopinath10@gmail.com | santhoshgopinath02.web.app
linkedin.com/in/santhosh-gopinath-14817335b | Palam Station Road, Sellur, Madurai

Executive Summary

Aspiring AI/ML Engineer with hands-on experience in Full-Stack and IoT development. Currently pursuing B.Tech in AI & Data Science, I focus on integrating AI models into functional web platforms and connected devices. Proficient in React JS, Python, and Entry-Level IoT, I am dedicated to building scalable solutions like recommendation engines and smart systems, making me a strong fit for roles in software and AI/ML development.

Technical Skills

- **Programming Languages:** Python (Basic), Java
- **Frontend Technologies:** React JS, HTML & CSS
- **Databases:** MySQL (Relational), MongoDB (NoSQL)
- **IoT:** Entry-Level IoT, ESP32, Bluetooth-Enabled Systems
- **AI/ML Technologies:** Natural Language Processing (NLP), Machine Learning (Recommendation Systems), Responsible AI
- **Tools & Platforms:** ACIC Mepco Innovation Foundation, NPTEL Courses
- **Other:** Computer Office Automation, Type Writing

Soft Skills

- Problem Solving & Analytical Thinking
- Teamwork & Collaboration (NSS, Club Activities)
- Communication (Quiz Talks, Paper Presentations)
- Time Management (Multiple concurrent semester projects)
- Adaptability (Cross-domain: Web, IoT, AI/ML)

Project Experience

Cryptographically Secure Pre-Voting System

Semester 8 — Duration: 3 Months

Role: Project Contributor

- Designed and developed a secure electronic pre-voting system using cryptographic protocols
- Implemented end-to-end encryption to ensure data integrity and voter privacy
- Built the frontend interface using React JS for a seamless user experience
- Conducted testing and debugging to ensure system reliability and security
- Documented the project architecture and presented findings to faculty

Impact: Delivered a fully functional secure voting prototype within 3 months, demonstrating applied cryptography in real-world scenarios.

MovieESP32 Cade: Handheld Retro Pacman Console

Semester 7 — Duration: 1 Month

Role: IoT Developer

- Built a handheld retro gaming console using the ESP32 microcontroller
- Programmed game logic and display rendering for a Pacman-style game
- Integrated hardware components including display module and input controls
- Optimized code for resource-constrained embedded environment

Impact: Successfully delivered a working retro gaming device, showcasing embedded systems and IoT development capabilities.

Movie Recommender System (MepExpo24)

Semester 7 — Duration: 1 Month

Role: AI/ML Developer

- Developed a content-based movie recommendation engine using machine learning
- Processed and cleaned movie datasets to extract relevant features
- Built and evaluated recommendation models using similarity metrics
- Presented the project at MepExpo24 college-level exhibition

Impact: Successfully exhibited at MepExpo24; system achieved accurate recommendations based on user preferences.

Social Media Development – React

Semester 6 — Duration: 1 Month

Role: Frontend Developer

- Designed and built a social media platform prototype using React JS
- Implemented core features including user feed, post creation, and interaction components
- Applied component-based architecture for modular and reusable UI
- Ensured responsive design for multiple screen sizes

Impact: Delivered a functional social media UI prototype demonstrating strong React JS proficiency.

Retail Sales Analytics and Forecasting

Semester 4 — Duration: 1 Month

Role: Data Analyst

- Analyzed retail sales datasets to identify trends and patterns
- Built forecasting models to predict future sales performance
- Visualized insights using charts and graphs for stakeholder reporting
- Applied statistical methods to validate forecasting accuracy

Impact: Produced actionable sales insights and forecasting reports, improving data-driven decision making.

Bluetooth-Enabled Smart Irrigation System

Semester 6 — Duration: 1 Month

Role: IoT Developer

- Designed a smart irrigation system controlled via Bluetooth connectivity
- Programmed microcontroller logic for automated and manual watering control
- Integrated sensors to monitor soil conditions and trigger irrigation
- Tested the system for reliability and responsiveness in real conditions

Impact: Built a working smart irrigation prototype demonstrating practical IoT and automation skills.

Education

Bachelor of Technology – Artificial Intelligence & Data Science (B.Tech AI&DS)

MepcoSchlenk Engineering College, Sivakasi
CGPA: 6.18

2023 – 2026

Diploma of Technology (DOTE)

GMS Mavmm Polytechnic College, Madurai
Percentage: 90%

2020 – 2023

Secondary School Leaving Certificate (SSLC)

Sairam Matric Hr. Sec. School, Madurai
Percentage: 72%

2020

Awards & Accomplishments

- NPTEL Certification – Java Programming
- NPTEL Certification – Responsible & Safe AI Systems
- OneCreditCourse Certification – Natural Language Processing (NLP)
- COA (Computer Organization & Architecture) Certification
- ACIC Mepco Innovation Foundation – Innovation & Entrepreneurship Recognition
- Participated and presented at MepExpo24 – Movie Recommender System (College Exhibition)
- NSS – Paper Presentation Participant
- Visited and trained at: Hatsun Dairy Institute (Tirunelveli), Science Park (Tirunelveli), IT Institute (Bangalore), ISRO (Bangalore)

Co-Curricular & Extra-Curricular Activities

- **Club Activity:** Member, Google Club – QuizTalks; NSS – Paper Presentation
- **Co-Curricular:** Type Writing, Computer Office Automation
- **Sports:** Carrom Player, Badminton