

# THARUN K

## Education

### SRM Institute of Science and Technology

Bachelor of Technology — CGPA: 8.40

Aug 2022 – May 2026

Kattankulathur, Chennai

### Kendriya Vidyalaya CUTN Residential Campus

Higher Secondary Education

Jun 2020 – Jul 2022

Thiruvannamalai, Tamil Nadu

## Experience

### Hyundai Motor India Limited

Machine Data Analytics Intern

Jul 2024 – Jul 2024

Sriperumbudur, Tamil Nadu (On-Site)

- Optimized real-time robot motion data analysis with MySQL & Python, improving anomaly detection accuracy by 18%.
- Automated threshold violation alerts (temperature, power), reducing unplanned downtime incidents by 25%.
- Developed Qlik dashboards enabling 100% live monitoring coverage and faster shop-floor decision-making.

### Daimler India Commercial Vehicles

Manufacturing Process Automation Intern

Dec 2024 – Jan 2025

Chennai, Tamil Nadu (On-Site)

- Automated Excel-based production planning with Python, cutting manual data handling time by ~40%.
- Designed an intuitive HTML/CSS interface that reduced planning errors and improved engineer adoption.
- Collaborated with the Manufacturing Engineering Team to align automation, achieving smoother production workflows.

## Projects

### LegalView – AI-Powered Legal Document Assistant | FastAPI, Python, LangChain, TypeScript [View Project](#)

Jan 2025

- Developed a sophisticated RAG system for legal document analysis with AI-powered question answering and intelligent document processing.
- Built a modern full-stack application featuring React frontend with glassmorphism UI design and FastAPI backend with document ingestion pipeline.
- Implemented semantic search, context-aware responses, and structured legal content formatting using Google Gemini AI and FAISS vector database.
- Enhanced UX with drag-and-drop document upload, real-time chat interface, document filtering, and comprehensive document management (view, download, delete).
- Designed responsive UI with smooth animations, professional branding, and multi-tab navigation supporting PDF, DOC, DOCX, and TXT file processing.

### SAFT ERP – Enterprise Resource Planning System | MERN, Supabase, PostgreSQL, Firebase [View Project](#)

Feb 2025

- Built ERP platform for manufacturing/textile businesses covering customers, products, orders, production, materials, and invoicing.
- Implemented Firebase Auth, JWT, and Supabase RLS for secure role-based multi-user workflows.
- Developed dashboards (React, Redux, React Query, Recharts) for real-time KPIs; automated GST-ready PDF invoicing via Puppeteer.
- Designed responsive UI/UX with Tailwind CSS, accessibility, and dark/light mode support.

### Real Estate Property Verification System | MERN Stack [View Project](#)

May 2025

- Developed full-stack property marketplace with role-based dashboards for sellers, buyers, agents, and admins.
- Implemented JWT authentication, ML-based anomaly detection for pricing, reducing fraud listings by 30%.
- Enhanced UX with chatbot assistance, animated transitions, category filters, and responsive layouts.

### Lung Disease Detection Web App | Python, TensorFlow, Flask [View Project](#)

Sept 2024

- Built CNN model to detect lung diseases from chest X-rays with real-time Flask interface.
- Achieved **92% accuracy**; designed as a clinical aid for faster, more reliable doctor-assisted diagnosis.

## Technical Skills

**Programming:** Python, Java, C++, SQL, HTML/CSS

**Frameworks:** React.js, Node.js, Flask, FastAPI, TensorFlow, Keras

**Developer Tools:** Git, Docker, GCP, VS Code, PyCharm

**Databases:** MySQL, MongoDB, PostgreSQL

## Certifications

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- [Oracle Certified Foundations Associate](#)
- [AWS Academy Cloud Operations](#)
- [Programming in Java \(NPTEL\)](#)
- [AWS Academy Graduate – Machine Learning Foundations](#)