# Harshavarthini Palanivel

Tamil Nadu, India
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## Education

**Government College of Engineering, Srirangam** **2023 – 2027**
*Bachelor of Engineering in Computer Science and Engineering* *Trichy,Tamil Nadu*

## Relevant Coursework

- Data Structures and Algorithms
- Object-Oriented Programming (Java)
- Database Management Systems
- Operating Systems
- Computer Networks
- Theory of Computation

## Experience

**MEDCHRONO PRIVATE LIMITED** **May 2026 – August 2026**
*Artificial Intelligence and Machine Learning Intern* *Chennai, Tamil Nadu*

- Developed an AI Medical Report Analyzer to extract, process, and summarize medical reports using AI and document-processing techniques.
- Built a medical chronology report generation system to organize patient medical records into structured chronological summaries.
- Developed AI-powered document question-answering solutions using Retrieval-Augmented Generation (RAG).
- Worked on OCR, PDF Processing, Generative AI, Git, GitHub, and automation solutions for medical documents.

## Projects

**Medical PDF Analysis and Summary System** | *Python, Streamlit, OCR, Gemini API* **April 2026**

- Developed an AI-powered application to analyze medical reports and generate structured summaries.
- Implemented OCR to extract text from scanned PDF documents.
- Integrated Gemini API for generating concise medical summaries.
- Added Word document export functionality for generated reports.
- Improved document processing accuracy by combining OCR with PDF text extraction.

**PDF RAG Chatbot** | *Python, LangChain, FAISS, Gemini API, Streamlit* **December 2025**

- Built a Retrieval-Augmented Generation (RAG) chatbot capable of answering questions from uploaded PDF documents.
- Implemented semantic search using the FAISS vector database.
- Integrated Gemini API for context-aware responses.
- Enabled multiple PDF uploads with efficient document indexing.

## Technical Skills

**Programming Languages:** Java, Python, JavaScript, SQL
**Web Technologies:** HTML, CSS, React.js
**Frameworks:** Spring Boot, Spring Framework, Streamlit, LangChain
**Databases:** MySQL, FAISS
**AI Technologies:** Generative AI, Gemini API, OCR, Retrieval-Augmented Generation (RAG), PDF Processing
**Developer Tools:** Git, GitHub, VS Code

## Achievements & Certifications

- Secured **1st Place (Top 5%)** among 20 teams in an Inter-College Hackathon.
- Programming in Python Certification – Livewire Academy, Mayiladuthurai.
- Participated in the Agentic AI Workshop at OPTIMA 2026, NIT Tiruchirappalli.