

CHARUVARTHAN T

Chennai, India

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EDUCATION

B.Tech in Computer Science and Engineering (Artificial Intelligence)

Amrita School of AI, Amrita Vishwa Vidyapeetham, Coimbatore

2023 – Expected 2027

PROJECTS

RASEED | Flutter, Google Wallet API, Firebase, Places API, Google ADK, Agents, Python, Knowledge Graph [GitHub](#)

- Built an AI-powered system to digitize and organize **receipts, warranties, and gift cards** into **Google Wallet**, improving accessibility and traceability.
- Designed intelligent agents including a **Remainder Agent** for **Google Calendar** alerts, a **Pass Generator**, and a **Knowledge Graph Builder** for financial insights.
- Integrated an **EcoSpend Agent** using **Google ADK** and **Places API** to suggest nearby **recycling centers** and promote **sustainable purchases**.

LEGALSPHERE | Flutter, Dart, RAG [GitHub](#)

- Built a **cross-platform voice-based legal assistant** (BNS) using Flutter with speech-to-text (STT) and text-to-speech (TTS) for AI-driven legal aid.
- Integrated **DeepSeek RAG** for contextual legal retrieval and **Gemini Pro** for image-based case interpretation.
- Enabled **multilingual support**, guided complaint filing, and real-time connection to legal resources for women.

EFFICIENT PROXY SERVER FOR SECURE WEB COMMUNICATION | Python, Sockets [GitHub](#)

- Developed a **lightweight proxy server** enabling secure and efficient web communication through **request forwarding, caching, and filtering mechanisms**.
- Enhanced **network performance**, improved **data privacy**, and optimized bandwidth usage using custom **socket programming**.

ACHIEVEMENTS

- Awarded Breakthrough Concept by **Google at Agentic AI Day**. [View](#)
Top student team among 700 finalists selected from 9,100+ submissions, out of 57,000+ developers
- 3rd Place in the **Gen AI x Gender Technology Hackathon** [View](#)
- Solved 750+ Problems on LeetCode [Profile](#)

Technical Skills

Core CS fundamentals: Data Structures & Algorithms, Object-Oriented Programming, Database Systems, Operating Systems, Computer Networks, System Design

Programming Languages: Python, C++, Java, JavaScript, Go, C

AI/ML Frameworks: PyTorch, TensorFlow, Hugging Face, LangChain

Web & App Development: React, Next.js, Node.js, Flask, FastAPI, Flutter, HTML, CSS, Tailwind, Bootstrap

Databases: MySQL, MongoDB

Tools & Platforms: Git, Docker, Cloud Platforms (GCP, AWS)

AI Domains: Generative AI, NLP, Retrieval-Augmented Generation (RAG/GraphRAG), Agentic AI, Model Context Protocol (MCP)

PUBLICATIONS

LSTM-Driven State of Charge Estimation for Battery Management [Dec 2024](#)

2024 IEEE 11th Power India International Conference (PIICON), Jaipur, India

<https://doi.org/10.1109/PIICON63519.2024.10995078>