

SHARAN KUMAR R

An engineer focused on building scalable, human-centric AI systems for the future

sharankumarjl723@gmail.com | +91 93447 80554 | github.com/Sharan-Kumar-R | linkedin.com/in/sharan-kumar-r

PROFESSIONAL EXPERIENCE

Professional Projects

- **CowKin – Sony-funded Project – Phase 1 (2023)**
Engineered a smart system for assessing cattle health vitals using GPS, Pandas, Folium, and FFT. The system involved Raspberry Pi 4, ESP32, and Sony Spresense microcontrollers.
- **Real-Time AI Voice-Chat-Bot – 2024**
Implemented a real-time voice assistant using Groq's LLaMA3 (via LangChain), Deepgram STT/TTS, and fplay. Enabled live voice input/output, with custom prompts, and streaming response generation via a Python-based architecture. It also includes a conversational chatbot for text interactions.
- **Voice AI – 2024**
Deployed a multimodal AI assistant platform supporting voice calls (Twilio), messaging, WhatsApp integration, and an interactive 3D AI avatar. This RAG system includes a Web UI for creating AI agents and managing AI personas via customizing prompts stored in SQLite and is powered by a Python/Flask backend with LlamaIndex and OpenAI (LLM).
- **AI-Powered Job Prospecting Assistant – 2025**
Developed an AI assistant to automate job prospecting and personalized email generation by matching job posting URLs to the user's resume or portfolio. The system was built using RAG, Python, LangChain, Groq (LLaMA 3), Playwright, ChromaDB, MCP, and Streamlit.
- **AI-Driven Social Media & Marketing Intelligence System – 2025**
Built an AI-driven multi-agent system using CrewAI and Gemini (LLM) to automate social media analysis and market research via an Agentic AI workflow. The system extracts insights from Instagram, LinkedIn, Facebook, and web sources via a custom MCP server, generating reports that include social insights, competitor strategies, marketing plans, KPI frameworks, and content creation.

Internship Experience

- **CISCO AICTE Virtual Internship Program (2023)**
Completed a 6-month remote internship focused on cybersecurity fundamentals, 20+ packet tracer simulations, and cloud security.
- **IoT Intern – JRM Technologies** (May 2024 – July 2024)
Built 3+ IoT-enabled web apps using Raspberry Pi, Arduino, and analytics tools; coordinated hardware and software integration.
- **AI Engineer Intern – Widezo Private Limited** (July 2024 – Aug 2025)
Contributed to the development of Agentic AI workflows, engineered multimodal user interfaces, integrated large language model (LLM) tools, and customized MCP server infrastructure to support scalable, modular AI systems.

Invited Talks & Workshops

- **4-Week Technical Session – AIIRF (Annamalai University)**
Led and delivered sessions on Neural Networks, Transformers, NLP, LLMs, and Generative AI to 50+ students and researchers, including hands-on projects with real-world AI tools and frameworks.

Leadership & Club Involvement

- IoT Lead – Google Developer Student Clubs
- IoT Core Team Member – Intel IoT Club
- Project Management Team Lead – Robotics Club
- Education Team Lead – NSS (National Service Scheme)

Awards and Achievements

- Inter Amrita Basketball Winners (2022 – 2024)
- Smart India Hackathon (SIH) – Qualifier, 2023
- Cisco ThingQbator National Hackathon – Advanced to Phase 2, 2023
- Intel OneAPI Hackathon – Qualifier, 2024
- Certificate of Completion – GDSC Core Member (2023 – 2024)
- Certificate of Recognition – IoT Core Member (2023 – 2024)

Publications and Research

- Artificial Intelligence: A New Paradigm in Fetal Medicine Research and Clinical Practice (Book Chapter – Springer, 2024)
- ML and DEA in Healthcare Applications (Book Chapter – Springer, 2025)

AREAS OF INTEREST

- Artificial Intelligence
- Software Development
- Internet of Things (IoT)

TECHNICAL SKILLS

- **Programming Languages:**
Python, Java (OOP)
- **Web Development:**
HTML, CSS, TailwindCSS, Node.js, Express.js, REST APIs
- **Databases:**
MySQL, PostgreSQL, SQLite, ChromaDB
- **Tools & Platforms:**
Twilio, MATLAB, Git, GitHub, Canva
- **AI & Machine Learning:**
LangChain, LangGraph, RAG, NLP, Generative AI, LLM, Fine-tuning LLMs, Prompt Engineering, TTS/STT systems, Transformers
- **Agentic AI:**
MCP Server, Agentic AI Workflows, CrewAI, n8n, Browserbase

CERTIFICATIONS

- Introduction to Packet Tracer (2023)
- Introduction to Cybersecurity (2023)
- Cybersecurity Essentials (2023)
- Introduction to Cloud Security (2023)
- Introduction to Artificial Intelligence (2023)
- Introduction to Natural Language Processing (2023)
- Introduction to Deep Learning (2023)
- Artificial Intelligence Foundation (2023)
- MATLAB Onramp (2024)
- Cisco Certified Network Associate – Systech Solutions, Coimbatore (2024)

EDUCATION

Amrita Vishwa Vidyapeetham, Coimbatore

B.Tech in Computer Science Engineering
CGPA: 7.59/10 (2021 – 2025)

K.S.R. AKSHARA ACADEMY, Tiruchengode

10th Grade – 464/500 (92.8%) 2018 – 2019

12th Grade – 456/500 (91.2%) 2020 – 2021

PERSONAL DETAILS

- **Language Proficiency:**
English (Professional), Tamil (Native), Telugu (Elementary)
- **Hobbies / Interests:**
Basketball, cycling, listening to music, and keeping up with technological advancements.
- Overall champion – School (2015 – 2019)
- House Vice Captain – School (2018 – 2019)
- Torch bearer – School (2019 – 2020)
- Sports Captain – School (2020 – 2021)