

LAKSHMI SAGAR SESHADRI

Madanapalle, India 517325 • +91 83415 43725 • lakshmisagar918@gmail.com

LinkedIn: <https://www.linkedin.com/in/lakshmi-sagar-seshadri-9295812b4/>

• GitHub: <https://github.com/LakshmiSagar570>

• Portfolio: <https://lakshmisagar570.github.io/Portfolio/>

EDUCATION

Madanapalle Institute of Technology & Science

2023 – 2027

B.Tech – Computer Science (AI & ML) | CGPA: 8.67 / 10

Intermediate - APSCE

2021 – 2023

Sri Sainatha Junior College, Madanapalle | Percentage: 94.3%

Matriculation - SSC

2021

Sri Chaithanya School | Percentage: 96%

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, C, C#

Frameworks & Libraries: React.js, Next.js, Node.js, Angular, Flask, .NET

Databases: PostgreSQL, MySQL, Supabase, PostGIS, MongoDB, Firebase

AIML Tools: Machine Learning, Computer Vision, Scikit-learn, Tensorflow, Image processing, PyTorch, OpenCV

Tools & Platforms: Git, GitHub, VS Code, Cursor, Kali Linux, Ubuntu

EXPERIENCE

Xenovex Technologies | Web Development Intern

Jun 2025 – Jul 2025

- Self-directed learning of Angular, C#, and .NET stack over 6 weeks as part of structured offline training.
- Built a full-stack Mood Journal web application as the primary deliverable.

PROJECTS

LFAN – Lightweight Feature Attention Network — Python, PyTorch, Google Colab, Jupyter

- Built a lightweight CNN for $\times 4$ single-image super-resolution, achieving 29.09 dB PSNR / 0.806 SSIM on DIV2K with 731K params (2.93 MB) and 78 ms inference on Tesla T4.
- Improved all 100/100 validation images over bicubic (+0.855 dB PSNR) through iterative architecture tuning and fine-tuning.

GitHub: <https://github.com/LakshmiSagar570/LFAN>

CropGuard AI – Crop Disease Detection System — Python, React.js, Node.js, Express, MongoDB

- Developed a full-stack AI system for crop disease detection using image analysis, supporting multiple crops and diseases.

GitHub: <https://github.com/LakshmiSagar570/CropGuard>

UCIS – Urban Cooling Intelligence System — FastAPI, PostGIS, Supabase, React, TypeScript, Sentinel-2/Landsat

- Full-stack AI-powered urban heat island detection and intervention planning system using free-tier cloud stack.
- Processes satellite imagery (Sentinel-2 / Landsat) with geospatial analysis to identify heat hotspots.

GitHub: Private repository (under active development)

SoilTwin — TypeScript, Python, JavaScript, CSS

- Full-stack digital twin application providing real-time analytics and ML-driven insights on soil characteristics.
- Integrated advanced data visualization components and machine learning inference pipeline.

GitHub: <https://github.com/LakshmiSagar570/SoilTwin>

AssumptionX — *Next.js, TypeScript, Tailwind CSS, PostgreSQL*

- AI-powered web application that identifies and challenges hidden assumptions in business plans and decisions.
- Deployed on Vercel: <https://assumption-x.vercel.app/>

GitHub: <https://github.com/LakshmiSagar570/AssumptionX>

Mood Journal — *Angular, .NET, C#, TypeScript, PostgreSQL, Chart.js*

- Daily mood tracking web application with JWT authentication, history calendar, and interactive data visualization.

GitHub: <https://github.com/LakshmiSagar570/MoodJournal>

EthosForge – Fraud Detection System — *Python, Scikit-learn, Pandas*

- Ensemble classifier for financial fraud detection with focus on ethical AI and model interpretability.

GitHub: <https://github.com/LakshmiSagar570/EthosForge>

RESEARCH & PUBLICATIONS

- “A Review on Large Language Models in Engineering” — Accepted, ICTIS 2026 (Oral), Springer LNNS.

Research manuscripts that are currently under peer review:

- Mapping the Evolution: A Scientometric Review of GIS Applications in Flood Hazard Mapping (1985–2025)
- Characterizing Small-Scale and Minimal-Disturbance Deforestation Trends in the Northeastern Brazilian Amazon (2015–2025) Using Landsat NDVI Time Series
- A Scientometric Review of Intrusion Detection in Internet of Things

ACHIEVEMENTS

- Won second prize in Hacksprint at Fusion 2k26
- Won in departmental and institutional Smart India Hackathon 2025
- Qualified in GATE DA 2026 in first attempt

CERTIFICATIONS & TRAINING

- NPTEL: Data Science for Engineers, Introduction to IoT, Design Technology & Innovation, Understanding Incubation & Entrepreneurship, Managing Intellectual Property in Universities
- Datacamp: AI Agents & Prompt Engineering, Introduction to AI Agents
- HP Life: AI for Business Professionals
- Wadhvani Foundation: Problem Solving & Innovation

ACTIVITIES & LANGUAGES

- Member, Indian Society for Technical Education (ISTE)

Languages: English (C1 Advanced) • Telugu (C1 Native) • Hindi (B2 Upper-Intermediate)