Mail: kartalasaimanoj@gmail.com Phone: +1-518-941-0211 Albany, NY 12203 LinkedIn: linkedin.com/in/sai-manoj-kartala-592ab9239 Portfolio: github.com/SaiManojK16/portfolio

PROFESSIONAL SUMMARY

Full-Stack Developer and AI/ML Engineer with experience designing scalable web platforms and deploying ML pipelines. Proven ability to automate processes, optimize data flow, and increase system efficiency. Skilled in MERN stack, FastAPI, TensorFlow, and cloud platforms such as AWS and Docker. Adept at cross-functional collaboration and delivering impactful tech solutions.

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C, SQL

AI/ML: TensorFlow, Hugging Face, OpenCV, Scikit-learn, LangChain, FAISS, ChromaDB

Web & Backend: MERN Stack, FastAPI, Flask, Node.js, Prisma ORM

DevOps/Cloud: AWS (Lambda, SageMaker, EC2, S3), Docker, Kubernetes, CI/CD

Databases & Tools: PostgreSQL, MongoDB, MySQL, Redis, Power BI, Tableau, Git, Jupyter

Design & Misc: Figma, Unity, Blender, Mux, Postman, Gradio

EDUCATION

M.S. in Computer Science, SUNY Albany, NY – GPA: 3.492024–2025Courses: Software Engineering, Artificial Intelligence, Operating Systems, DBMS, Algorithms & Data Structures2019–2023B.Tech in Computer Science, GITAM University, India – CGPA: 3.652019–2023Courses: Analysis and Design of Algorithms, Data Structures, Theory of Computation, Advanced Java, Web Technology

EXPERIENCE

Full Stack Web & Mobile developer

- Spearheading the end-to-end development of an interactive AR-based educational platform as part of the MARVLS research initiative.
- Designing and deploying a full-stack website from scratch to showcase and support AR learning experiences.
- Building mobile applications using Flutter for both iOS and Android, integrating real-time AR models with educational content.
 - Developing and optimizing 3D AR experiences using Unity for interactive STEM visualizations.

Machine Learning Intern

Trained CNNs in TensorFlow to classify medical CT images, improving accuracy by 15%.

• Collaborated with data scientists and healthcare experts, validating model reliability on 5,000 clinical samples.

EXTRACURRICULAR

Data Structures Grader

- Evaluated weekly programming submissions for 50+ undergraduates with 99% accuracy.
- Automated grading using Python, reducing manual effort by 40%.

Computer Graphics Lab Assistant

- Supported 10+ OpenGL projects, managing lab setups for 50+ students.
- Mentored students on graphics projects, improving success rates by 25%.

PROJECTS

AI-Powered Course Management Platform [Next.js, Node.js, Prisma ORM, GPT-4, BERT, Mux]

- Built academic platform with assignment submission, real-time collaboration, and structured student-teacher interaction.
- Integrated secure code execution and AI-powered document editor for coursework and grading workflows.

WearMe – AI Outfit Recommendation App [MERN Stack, FastAPI, TensorFlow, OpenCV]

- Built AI styling assistant recommending weather-based outfits with fabric, color, and occasion matching.
- Used MERN, FastAPI, TensorFlow with a wardrobe dashboard for full-stack personalization.

DocP – AI Document Parsing & Extraction [OCR, NLP, Python, TensorFlow, Dash]

- Developed OCR + NLP parser improving data accuracy by 20%.
- Built AI-powered dashboards reducing decision-making time by 30%.
- Featured as Best Project at University Showcase.

$\mathbf{ChoreWise} - \mathbf{Task} \ \mathbf{Automation} \ \mathbf{App} \ [\mathrm{MERN \ Stack, \ Firebase, \ Node. js}]$

- Mobile app for roommates to manage and assign chores.
- Includes real-time chat and reduced household conflict by 40%.

Tried & Tasted – AI Meal Planner [PHP, MySQL, TensorFlow, OCR]

- Built full-stack platform to plan meals, auto-generate shopping lists, and scale recipes.
- Personalized with SQL logic and AI assistance using PHP, MySQL, TensorFlow, and OCR.

SUNY Albany | Sep 2024 – May 2025

MARVLS, LLC @ Siena College | May 2025 - Present

Phoenix Global (Remote) | May 2022 – Jul 2022

GITAM University | Dec 2019 - Apr 2022