Sai Manoj Kartala

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#### 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, C, Java, SQL, JavaScript

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

Full-Stack: MERN Stack, FastAPI, Flask, Node.js, Prisma ORM

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

**Databases:** PostgreSQL, MongoDB, Snowflake, Redis, Power BI, Tableau, MySQL **Software Engineering:** API Development, System Design, AI Model Deployment

UI/UX: Figma, Wireframing, Gradio

Tools/Frameworks: Unity, Blender, Mux, Git, GitHub Actions, Postman, Jupyter

**EDUCATION** 

M.S. in Computer Science, SUNY Albany, NY – GPA: 3.49

Relevant Coursework: AI, Machine Learning, Databases, OS, Software Engineering

B.Tech in Computer Science, GITAM University, India – CGPA: 3.65

2019-2023

2024-2025

#### PROFESSIONAL EXPERIENCE

### Augmented Reality Research Assistant

Siena College (Remote) — May 2025 - Present

- Built Unity-based AR application for STEM visualization, improving student comprehension by 35%.
- Developed and launched the outreach website, increasing visitor engagement by 60%.

#### **Data Structures Grader**

SUNY Albany — Sep 2024 - May 2025

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

## Machine Learning Intern

Phoenix Global (Remote) — May 2022 - Jul 2022

- Trained CNNs in TensorFlow to classify medical CT images, improving accuracy by 15%.
- Optimized processing pipeline for 10K+ images/month, reducing false positives.

### Computer Graphics Lab Assistant

GITAM University — Dec 2019 - Apr 2022

- Conducted 50+ OpenGL workshops, improving lab outcomes by 25%.
- Authored documentation and resolved 30% of recurring student issues.

### 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.

## ChoreWise – Task Automation App [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.