

# Mahesh Kumar Tippanu

AI Software Engineer with 2.5 years of combined experience in ML development, backend engineering.  
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## Career Objective

AI Engineer specializing in Agentic AI, Machine Learning, Image Processing, and secure cloud-ready deployments. Focused on building scalable AI systems, automation workflows, and research-driven engineering solutions.

## Strengths

- Strong Python and ML Engineering
- Image Processing Foundations
- Secure Coding (TOTP, MFA, API Security)
- Agentic AI Automation (Flowise, Multi-Agent Orchestration)
- Cloud Deployment Experience (Azure, Docker)
- Fast Learner, Ownership Mindset, Team Player

## Technical Skills

**Languages:** Python, Java, TypeScript, SQL  
**AI/ML:** scikit-learn, OpenCV, NLP, LangChain, Flowise  
**Frameworks:** Node.js, Express, Spring Boot, Flask  
**Cloud/DevOps:** Azure, Docker, PostgreSQL, CI/CD  
**Tools:** Git, REST APIs, Streamlit, PowerShell

## Education

**M.Tech — Computer Science & Engineering**, GITAM University CGPA: 8.0/10 2024 – Present

**B.Tech — Civil Engineering**, Andhra University CGPA: 6.1/10 2014 – 2020

## Professional Experience

**AI Agentic Engineer — Intern** Sept 2025 – Nov 2025  
Nova3Ark, Bangalore

- Created AI-driven workflows integrating Flowise with WhatsApp Cloud API.
- Built Node.js microservices enabling agent-user communication.
- Designed and implemented secure TOTP MFA with QR onboarding.
- Improved multi-agent orchestration response time by 30%.
- Developed Dockerized pipelines with structured logging.

**Desktop Support Engineer** Jan 2024 – Sept 2024  
Frontier Communications Pvt Ltd, Hyderabad

- Managed Azure VM infrastructure ensuring 99% system uptime.
- Automated server tasks using PowerShell/Python reducing manual work by 25%.
- Supported DevOps CI/CD workflows and secure credential management.

## Python Developer

Paccore IT Solutions, Hyderabad

Feb 2023 – Oct 2023

- Developed ML-driven healthcare analytics using scikit-learn & Flask.
- Built ETL pipelines improving clinical data processing by 40%.
- Improved API response times and raised test coverage to 88%.

## Apprentice Engineer

BridgeLabz Solutions, Mumbai

Mar 2022 – Jan 2023

- Completed full-stack Java training (Spring Boot, REST APIs).
- Built internal dashboards and MySQL data-access components.

## Key Projects

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### AI Image Processing System (X-ray Detectors)

- Implemented noise removal, edge detection, contrast enhancement.
- Built OpenCV-based feature extraction pipelines.

### Agentic AI Data Generator (2025)

- Multi-agent architecture for schema analysis & structured data synthesis.
- Export formats include CSV, JSON, XML, SQL.

### Crypto Recommender System (2024)

- Real-time ML trend prediction deployed on Azure Cloud.

### Journal Recommendation System (2024)

- Logistic Regression ranking model for academic journal selection.

## Certifications

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Microsoft Certified: Azure Fundamentals (2024)

Google IT Support Professional Certificate (2024)

TCS NQT Qualified — 79.69% (Feb 2024)

Shortlisted — IndoML Datathon, BITS Pilani (Dec 2024)