

Venkatalakshmi Kottapalli

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PROFESSIONAL SUMMARY

Results-driven AI/ML Software Engineer with 4+ years of professional experience in software engineering and artificial intelligence, specializing in developing intelligent chatbots, AI agents, and ML models. Strong communication and collaboration skills, quickly adapting to emerging technologies and industry trends.

EDUCATION

Master's in Artificial Intelligence | Yeshiva University | NY | GPA: 4.0/4.0 | Jan 2024 - Aug 2025

Bachelor's in Mathematics | Adikavi Nannaya University | India | GPA: 3.8/4.0 | June 2015 - May 2018

SKILLS

Languages: Python, SQL, R, Cypher
Databases: PostgreSQL, Neo4j
Frameworks: Scikit-learn, PyTorch, TensorFlow, Keras, OpenCV, LangChain, LangGraph, NLTK
Cloud: AWS, GCP, Azure, Heroku, Streamlit
API & DevOps: Flask, FastAPI, REST APIs, Docker, Kubernetes, CI/CD
Tools: Jupyter, Visual Studio Code, Power BI, GitHub, Azure DevOps
AI/ML: Machine Learning, Deep Learning, Data Science, NLP, Computer Vision, LLMs, RAG, AI Agents

WORK EXPERIENCE

Machine Learning Co-op | ZSAnalytics LLC May 2024 - Present

- Developed and deployed AI solutions to address business challenges, managing the full machine learning lifecycle and contributing to innovative product development.
- Analyzed over 1 million email campaign records using supervised and unsupervised learning algorithms, achieving 97% model accuracy and reliability.
- Performed data extraction and processing using Python, SQL, statistical methods, and data mining techniques; utilized NumPy and Pandas for feature engineering, improving model precision by 12%.
- Established and maintained testing frameworks for model evaluation and tuning using gain charts, and A/B testing, ensuring model fairness, and accuracy in production systems by troubleshooting issues.
- Optimized email marketing strategy by targeting the top 25% of high-response users, reducing delivery costs by 75% while maintaining 98% engagement through statistical analysis & technology integration.

Software Developer AI/ML | Mee Sahayakaari Jan 2019 - Dec 2021

- Built an AI chatbot using Dialogflow, Google Translate and Speech-to-Text APIs, leveraging software development tools for application development, enhancing customer experiences for 5,000+ users.
- Developed cross-platform mobile apps with the Ionic framework, achieving 90% customer satisfaction through responsive UI/UX and reducing user onboarding time by 40%.
- Implemented CI/CD pipelines in Azure DevOps, following agile engineering practices, project management and software development lifecycle best practices, accelerating release cycles by 30%.

PROJECTS

GenAI Agent: Developed an agent using FastAPI, LangChain and LangGraph to automate order processing, account management, and inventory tracking, addressing customer needs and enabling efficient application integration by utilizing technology to reduce manual workload by 60%.

RAG-Based Chatbot: Created a Retrieval-Augmented Generation (RAG) Chatbot using Gemma LLM and FAISS, delivering 90% accurate, citation-backed responses sourced from a domain-specific database.

Computer Vision: Applied deep learning techniques using PyTorch to detect X-rays, achieving 85% accuracy.