

# VENKATALAKSHMI KOTTAPALLI

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## SUMMARY

AI/ML Engineer with 4 years of experience developing intelligent systems, chatbots, and ML models using Python, SQL, and cloud platforms, seeking impactful opportunities in AI-driven product development.

## EDUCATION

**Master's in Artificial Intelligence**, Yeshiva University, New York City, NY GPA: 4.0; Expected Dec 2025

Relevant Courses: Machine Learning, Data Science, Neural Networks & Deep Learning, NLP, Cloud Computing

**Bachelor's in Mathematics**, Adikavi Nannaya University, India

GPA: 3.8; June 2015 - May 2018

Relevant Courses: Statistics, Probability, Linear Algebra, Matrices, Calculus, Geometry

## SKILLS

- **Programming Languages:** Python, SQL, R, Cypher
- **Machine Learning & AI:** Supervised Learning, Unsupervised Learning, Deep Learning, Neural Networks, NLP, Computer Vision, LLMs, Transformers, RAG, AI Agents, Model Deployment
- **Frameworks & Libraries:** Scikit-learn, PyTorch, TensorFlow, Keras, OpenCV, NLTK, LangChain, LangGraph
- **Databases:** PostgreSQL, MySQL, Neo4j, NoSQL, FAISS Vector Database
- **Cloud, API & DevOps:** AWS, GCP, Azure, Heroku, Streamlit, Flask, REST APIs, CI/CD
- **Data Tools:** Jupyter, Visual Studio Code, Power BI, GitHub, Azure DevOps, A/B Testing, Data Visualization

## WORK EXPERIENCE

**Machine Learning Co-op**, ZSAnalytics LLC

May 2024 - Present

- Enhanced email campaign performance by 35% by applying ML models in Python with advanced feature engineering, SQL, and data wrangling to identifying top 25% responsive subscribers from a 10K database
- Created Power BI dashboards visualizing engagement metrics, delivering actionable insights that improved stakeholder decision-making efficiency by 40%

**Software Developer (AI/ML)**, Mee Sahayakaari

Jan 2019 - Dec 2021

- Developed an AI voice chatbot serving 5,000 non-literate users with 90% satisfaction, integrating Dialogflow, Google Translate, and speech APIs for multilingual support
- Built cross-platform Ionic applications, optimized API performance, reducing latency by 40% and increasing user retention by 30%

## PROJECTS

- **AI Agent:** Built LLaMA-powered agent using LangChain and LangGraph to automate order processing, account checks, and inventory management, reducing manual work by 60%
- **RAG-Based Chatbot:** Built a retrieval-augmented chatbot using Gemma LLM and FAISS vector search, delivering citation-backed answers from the Speech and Language Processing textbook with 95% accuracy
- **Fraud Detection:** Built ML pipeline using Python and SQL, achieving 96% accuracy in fraud detection
- **Customer Segmentation:** Built a data pipeline & used clustering to identify customer groups for marketing.
- **Customer Churn:** Built churn model using Scikit-learn with 95% accuracy and deployed API with CI/CD

## LEADERSHIP & ACTIVITIES

**AI Teaching Assistant**, Yeshiva University, NY

- Assisting in AI projects and research, focusing on Large Language Models (LLMs) and GenAI

## ACHIEVEMENTS

- **Certificate of Excellence in Machine Learning** - Awarded for an innovative fraud detection project
- **Research** - X-ray Detection using CNN, Bird Sound Segmentation, generating images using CycleGANs