# NIKITTA K S

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## EDUCATION

**Coimbatore Institute of Technology**                                                                    **October 2021 – Present**
Integrated Masters in Artificial Intelligence and Machine Learning
**National Model Matric Higher Sec School**                                                              **June 2020 – April 2021**
Class 12th, Percentage - 87.3%

## SKILLS

Programming languages: Python; Databases: SQL
AI Skills: OCR, NLP, STT, TTS
Libraries/Frameworks: Pandas, NumPy, Matplotlib
Web Skills: HTML, CSS, JavaScript, MERN [Basics]

## WORK EXPERIENCE

**Raarya, Coimbatore (Freelance)**
*AI Engineer Intern*                                                                                        **December 2024 – April 2025**
- Designed and developed an AI voice assistant for a real estate company using TTS and STT to deliver natural, human-like conversations, replacing traditional BPO-based communication.
- Integrated Retrieval-Augmented Generation (RAG) with Google Gemini, context-aware voice responses based on a structured real estate knowledge base, allowing the assistant to answer client queries about pricing, location, and property features accurately in real time.

**Finari Services Private Limited, Chennai (Hybrid)**
*Full Stack Developer Intern*                                                                              **July 2024 – November 2024**
- Engineered a geolocation-based access control system, automated speech-to-task conversion (AWS Transcribe + Gemini), and developed NLP-driven support tools (ticket prioritization, recommendation engines) also automated test case generation from RTMs to enhance security and operational efficiency.
- Built OCR automation for document processing, conducted automated vulnerability assessments (AWS Inspector), and developed predictive models for customer churn risk and lifetime value (CLTV) to drive data-driven retention strategies.

## PROJECTS

**TOVA AI - AI Agent (Text-to-SQL)**
- Built an AI-powered Text-to-SQL agent that supports creating, deleting, altering, and analyzing SQL queries in MySQL. Included features like smart query suggestions, example data previews, and automatic table structure summaries.
- Integrated Ollama, Gemini to convert natural language into SQL queries, and displayed visualized query results to support clear, AI-assisted data exploration and decision-making.

**Visionary UI – AI Powered Design-to-Code Converter**
- Developed a React web app using Gemini AI to convert images, sketches, text, and voice inputs into responsive HTML/CSS, featuring real-time voice-to-code transcription with AWS Transcribe and WebSocket integration.
- Built a Node.js/Express backend with WebSocket support for live updates and file processing, and implemented modern UI features like dark mode, canvas sketching, and interactive previews.

**MedNLP: Patient Condition Classification Using NLP**
- Developed an NLP pipeline to classify patient medical conditions from drug reviews using vectorization techniques (BoW, TF IDF) and machine learning models.
- Achieved 89.2% accuracy using Passive Aggressive Classifier with TF-IDF, outperforming Naïve Bayes (82.2%). Evaluated models with precision, recall, and F1-score.

## ACHIEVEMENTS

NPTEL Certification in Ethical Hacking
Secured a position within top 30 teams in Zarothon – **Amrita Vishwa Vidyapeetham (Top 30 of 708)**
100 Days of Code: Complete Python Pro Bootcamp – **Udemy**
Full Stack Web Development – **DevTown**
Participated in Melinia Hackathon 2024 – **Coimbatore Institute of Technology**