# HEMANTH REDDY ALLUGUNTI

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# EDUCATION

# SRM Institute of Science and Technology

Bachelor of Technology in Artificial Intelligence

### EXPERIENCE

## **Research Experience**

 $Undergraduate\ Researcher$ 

- Conducted a comparative study titled "A Comparative Study between Traditional CNN and Quantum CNN in Face Recognition," currently finalizing outcomes and insights
- Researching the applications of Quantum CNNs in face recognition

# Projects

AI-Driven Conversational Agent | Groq API, LangChain, Streamlit, Python, JavaScript August 2024

- Developed a conversational agent capable of human-like interactions using the Groq API model.
- Integrated LangChain for advanced language model management, enabling real-time contextual understanding and dynamic response generation.
- Optimized and deployed on Streamlit, ensuring a smooth and responsive user experience.

# TalentScout Hiring Assistant | Streamlit, Python, Firebase, Gemini AI

- Built an AI-powered hiring assistant with automated candidate evaluation, structured interviews, and real-time scoring.
- Integrated Gemini AI for intelligent assessment and secure data storage using Firebase.
- Provided candidates with real-time feedback, assessment results, and data management options.

#### RetailVisionAI | PyTorch, Flask, Microservices, JSON, YOLO

- Developed an AI-driven pipeline for product detection in retail images using Flask and PyTorch.
- Implemented YOLO for real-time object detection, enhancing accuracy and processing speed.
- Designed microservices to process images and return structured JSON responses for product grouping.

Biometric Face Recognition System | Python, OpenCV, NumPy, TensorFlow

- Built a biometric face recognition system using CNNs for image classification.
- Integrated face registration, model training, and recognition with OpenCV, logging recognized users and announcing names via text-to-speech (TTS).

Negotiation Chatbot | Rasa, Python, Natural Language Processing (NLP), Custom Policies September 2024

- Developed a chatbot simulating real-time price negotiations, leveraging Rasa's NLU pipeline for intent classification, slot filling, and dynamic dialogue management.
- Integrated custom logic to evaluate user offers against predefined pricing thresholds, delivering tailored responses and guiding users through the purchase flow.

#### TECHNICAL SKILLS

Programming Languages: Python, SQL
Machine Learning and AI: TensorFlow, PyTorch, Scikit-learn
Natural Language Processing (NLP): Rasa, LangChain, Hugging Face
Computer Vision: OpenCV, YOLO, Scikit-Image
Web Development: React, Node.js, Flask, MongoDB, HTML, CSS
Other Tools: Streamlit

Chennai, India Sep. 2021 – May 2025

SRMIST, KTR

November 2023 – Present

November 2024

February 2025

February 2024