

Pranav Rao

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Bachelor of Technology

in Computer Science and Engineering

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SUMMARY

Looking for MTech/PhD opportunities in the field of Natural Language Processing

EDUCATION

Degree	Institute	CGPA/Percentage	Year
B.Tech CSE	Indian Institute of Technology Palakkad	8.95 (Current)	2021-Present
Senior Secondary	New Horizon Scholars School, Thane (CBSE)	97%	2021
Junior Secondary	Dhyan Ganga International School, Thane (ICSE)	96%	2019

WORK EXPERIENCE

- **Machine Intelligence Program, IIT Bombay** *May - July 2024*
[Certificate](#)
ML Intern
 - Multi-Modal RAG-based LLM for Information Retrieval
 - Feedback assisted RAG application with textual and visual I/O capabilities

PROJECTS

- **Incorporating Temporal Commonsense in Conversational Chatbot** *Jan 2024 - Present*
[Website Link](#)
OELP ID3802
 - Created a chatbot using T5 Model which can understand temporal common sense (Mentored Project done as a duo)
- **Effect of Entanglement on Cooperative Games** *Aug - Dec 2023*
[Report Link](#)
OELP ID3801
 - Mentored Project on constructing hypothetical games that demonstrate the advantage of quantum strategies over classical strategies
- **Hotel Management Portal** *Jan - May 2024*
[Repo Link](#)
CS3120
 - Created a website for hotel management (DBMS Group Project)
- **Marching Squares** *Apr 2024*
[Website Link](#)
CS5016
 - Implementation of Marching Squares Algorithm as an individual course project

TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, C, Java
- **LLMs and RAG Applications:** Built fine-tuned chatbots and RAG chains using Langchain, Langgraph, Langsmith, DSPy, HuggingFace, Pinecone, Weaviate, Lancedb
- **Tools:** Docker, AWS, Git, LaTeX, PostgreSQL, Processing
- **Machine Learning:** Built models involving transformers; can use Scikit-Learn & PyTorch
- **Quantum Computing:** Can utilise algorithms such as QFT, QAOA, Grover, QPE, can utilise Qiskit
- **Areas of Interest:** Data Science, Quantum Computing

TRAINING AND WORKSHOPS

Workshop Name	Institute	Certificate	Duration
Qiskit Global Summer School 2023	Qiskit, IBM Quantum	Link	July 2023
Quantum Computing: Introductions to algorithms and implementations using Qiskit	Qkrishi, IISER Tirupati	Link	May - Jul 2022
Petrichor Machine Learning and Deep Learning Workshop	IIT Palakkad	Link	Feb 2023

POSITIONS OF RESPONSIBILITY

- **Secretary, Akshar Club, IIT PKD** *Oct 2022 - May 2023*

ACHIEVEMENTS

- **7th National Level NELTAS ECAT Grand Finale 2017-18**, Medal for Merituous Performance [Link](#)
- **Vidyarthi Vigyan Manthan 2019**, 3rd Rank in Maharashtra State and 1st Rank in Thane District [Link](#)

EXTRA CURRICULAR ACTIVITIES

- **Languages:** English, Hindi, German
- **English Creative Writer:** Writing articles, plays, poems, stories, etc.; Part of numerous Creative Content teams ([Link](#))