Relevance of My Qualifications and Experience to the Role

As someone passionate about building impactful solutions with technology, my academic journey in Computer Science — with a focus on Artificial Intelligence and Machine Learning — has been all about blending theory with real-world application. I've been fortunate to explore a range of domains, from research and public infrastructure to education and rural development, each one adding a new layer to my learning.

One of the highlights was my internship with the Defence Research and Development Organisation (DRDO), where I built an offline LLM (Large Language Model) client application. The goal was to enable secure language model usage without internet access — something critical in defense settings. I used FastAPI and tools like Ollama to ensure everything ran smoothly. This experience deepened my skills in NLP and secure AI applications, and gave me confidence in developing tech for high-stakes environments.

I also got to explore cognitive AI during my internship at NIT Goa, where I worked on EEG-based lie detection. The project focused on analyzing brainwave patterns to detect deception. It was fascinating to apply AI to something as human as thought, and it really sharpened my data analysis and signal processing skills.

At TGSPDCL, a government power distribution company, I interned in the IT division. I worked with real-time monitoring data, helped manage backend analytics, and learned about GIS/SCADA integration. It gave me exposure to how large-scale public systems operate and how data-driven automation can improve efficiency.

My time with the AICTE IDEA Lab was focused on rural innovation. I built machine learning models aimed at helping small-scale entrepreneurs solve real-world problems. It was fulfilling to use tech to support people at the grassroots, and it taught me to think more creatively and empathetically about solutions.

On the software development side, I led the creation of a full-stack EdTech e-commerce platform for the NGO Next Skills 360. I used React.js for the frontend, integrated Razorpay for payments, and added Kommunicate for live chat support. This project taught me how to think end-to-end — from clean design to seamless functionality. I also built a MERN stack portfolio and led projects involving consumer service portals and agri-price forecasting using ML models like ARIMA and XGBoost.

Outside of projects and internships, I've taken up leadership roles that I really value. As Vice Chair of IEEE RAS and a board member at ACIC-Avinya, I've organized tech workshops, innovation challenges, and peer mentorship events. These experiences have strengthened my communication skills and taught me how to work with diverse teams toward shared goals.

Looking back, I feel my journey has been about more than just technical skills — it's about being curious, solving real problems, and making a difference. Whether it's defense, public utilities, rural tech, or education, I've tried to contribute meaningfully wherever I could. I'm excited to bring this mindset, along with my technical skills and collaborative spirit, to new challenges ahead.