As a Data Science and Artificial Intelligence undergraduate, I've always been drawn to solving real-world problems through technology. My journey so far has been a blend of data-driven exploration, deep learning research, full-stack development, and meaningful leadership roles across academic and professional settings.

💼 Projects & Research Work

One of my most impactful experiences was during my internship at **TIH-IoT, IIT Bombay**, where I worked on a tool condition monitoring system. I developed a hybrid deep learning model combining **Variational Autoencoders (VAE)** and **1D Convolutional Neural Networks (1D-CNN)** to classify tool breakage conditions in a manufacturing setup. The VAE helped in learning compact representations from high-frequency sensor data, while the 1D-CNN effectively captured temporal patterns, improving classification accuracy.

At **NoQs Digital**, where I was recognized with the **Star Intern Award**, I designed automated pipelines using **Google Sheets API**, **Apps Script**, and **Python**, significantly reducing manual effort. I also crafted **interactive dashboards in Power BI**, enabling real-time analytics that directly supported decision-making across departments. It was a holistic experience involving data engineering, visualization, and communication with stakeholders.

🌐 Web Development & Leadership

I played a key role in developing the **Polaris website**, a hub for technical societies and student initiatives. Using the **MERN stack**, I contributed to both the frontend UI and backend logic, creating dynamic content sections and CMS features. This project refined my ability to manage real-time content, user authentication, and responsive design.

🔧 Positions of Responsibility

Currently serving as a **DSAI Representative** and **Mentor Coordinator**, I've taken on responsibilities like mentoring juniors, organizing sessions, and streamlining mentorship structures. A defining moment in this role was when one of my juniors taught me the power of early execution. He made it a habit to begin tasks immediately upon receiving them, which not only ensured timely completion but also gave room for creative refinements and contingency planning. This shifted my mindset from planning to proactive execution—one of the most valuable lessons I've learned outside a classroom.

As an **Executive Member of the Student Alumni Cell**, I contribute to organizing alumni events, fostering industry-academia connections, and building a strong community presence. These experiences have boosted my communication skills, time management, and strategic thinking.

📊 Skills & Tools

- **Languages**: Python, C/C++, JavaScript, TypeScript, LaTeX

- **Frameworks**: PyTorch, TensorFlow, Keras, MERN, LangChain

- **Tools & Libraries**: Pandas, Scikit-learn, Power BI, BeautifulSoup, MQTT, Google Apps Script

- **Domains**: Machine Learning, Deep Learning, NLP, Data Visualization, Full-stack Development

- **Soft Skills**: Leadership, Communication, Analytical Thinking, Initiative-taking