



## EDUCATION AND SCHOLASTIC ACHIEVEMENTS

Program	Institute	% / CGPA	Year
B.Tech in Chemical Engineering	Indian Institute of Technology, Madras	7.09	2026
Class XII (BSEB <sup>1</sup> )	College of Commerce, Arts and Science, Patna	81.4 %	2021
Class X (CBSE <sup>2</sup> )	Aadarsh Vikas Vidyalaya, Patna	90.0 %	2019

## ACHIEVEMENTS

- Chosen as **delegate** for **HPAIR** Conference in **Japan**, representing in a **global** forum for leadership and international collaboration in **2025**
- First Runner-up** in Future Insights Challenge by **Textify Analytics** for advanced data analysis, 5 - 10 year forecasting, and Industry insights
- Selected to present a **Research paper** at prestigious **CompFlu-24<sup>3</sup>** International Soft Matter Research Conference, **IIT Hyderabad in 2024**
- Ranked 87th** at State and 1474th at the National level in **Mathematics** by the Science Olympiad Foundation, demonstrating excellence.

## PROFESSIONAL EXPERIENCE

<b>Cybersecurity Intern</b> ( Under Prof. N.S. Narayanaswamy ) ( June'25 – Present )	<i>AI/ML based solution capable of detecting phishing domains and pages for specific target organisations.</i> <ul style="list-style-type: none"><li><b>Implemented</b> domain similarity, <b>WHOIS</b>, <b>DNS</b>, and age verification, with <b>92%</b> suspicious phishing domains detected</li><li><b>Built</b> advanced parsing-based <b>web crawling</b> with <b>form detection</b> and <b>SSL validation</b>, detecting <b>88%</b> malicious pages</li><li><b>Applied</b> robust screenshot-based pattern recognition with <b>ML model</b>, increased phishing detection coverage by <b>65%</b></li></ul>
<b>Project Monitoring &amp; Analytics Intern</b> ( ACR Office, ICSR IITM ) ( May'25 – Aug'25 )	<i>Automated project tracking in Monday.com for real-time updates and enhanced stakeholder visibility</i> <ul style="list-style-type: none"><li>Built data-driven project management systems via <b>Monday CRM</b>, streamlining <b>fund tracking</b>, allocation deployment</li><li>Automated the intel <b>workflow analytics</b> reporting dashboard using <b>AI</b> for <b>real-time system performance monitoring</b></li><li>Analysed critical <b>process dependencies</b> and <b>stakeholder data</b> to improving the key <b>strategic decision-making</b> path</li></ul>
<b>R&amp;D<sup>4</sup> Intern</b> ( Under Prof. Abhijit ) ( May'24 – July'24 )	<i>Optimized UV-curable resin to produce high-fidelity porous 3D-printed substrates with improved structural integrity</i> <ul style="list-style-type: none"><li><b>Optimised UV-curable resin</b> formulations with <b>silica additives</b>, enhancing <b>3D printed substrate</b> strength &amp; precision</li><li>Conducted <b>rheology</b>, <b>SEM</b>, and wetting experiments to evaluate the <b>structural integrity</b> and <b>material performance</b></li><li>Calibrated 3D printing parameters for <b>porous substrates</b>, improving <b>dimensional accuracy</b> and mechanical stability</li></ul>

## TECHNICAL PROJECTS &amp; HACKATHONS PROJECTS

GENAI	<b>Stakeholder Assist Chatbot</b>	<i>Q&amp;A chatbot leveraging LLMs and RAG to automate domain-specific query handling and information access.</i> <ul style="list-style-type: none"><li>Built a domain-specific Q &amp; A chatbot using <b>LangChain</b> and <b>OPENAI</b> to handle multi-turn project queries efficiently</li><li>Implemented a <b>RAG pipeline</b> using <b>Pinecone</b> &amp; <b>HuggingFace embeddings</b> for accurate <b>semantic search</b> across data</li><li>Heroku, Flask, integrating <b>ConversationBufferMemory</b> for <b>multi-turn contextual responses</b>, streamlining workflow</li></ul>
	<b>Market Trend Forecasting</b>	<i>Stock Price Forecasting Using Long Short-Term Memory (LSTM) Neural Networks for Time-Series Analysis</i> <ul style="list-style-type: none"><li>Built the <b>deep learning pipeline</b> with multi-layer <b>LSTM</b> to forecast Companies prices from <b>10</b> years of historical data</li><li>Engineered time-series features like <b>100-day</b> moving averages and applied <b>MinMaxScaler</b> for the faster convergence</li><li>Achieved an impressive <b>R<sup>2</sup></b> score of <b>0.98</b> and visualized predictions, residuals, and trends using Matplotlib for analysis</li></ul>
AI / ML	<b>RiskGuard</b> Credit Card Risk Analysis	<i>Designed machine learning model that enables financial institutions to identify high-risk customers vulnerable to fraud</i> <ul style="list-style-type: none"><li>Pre-processed <b>1.8M</b> records with <b>SMOTE</b> and <b>PCA</b>, resulting in <b>35% decrease</b> in training time and <b>15% boost</b> in recall</li><li>Utilised feature engineering techniques: <b>WoE</b> and <b>IV</b> to optimise performance and reduce credit default rate by <b>21%</b></li><li>Built credit scorecard with <b>decision trees</b>, achieving <b>0.5 Gini coefficient</b> &amp; improving high-risk identification by <b>40%</b></li></ul>
	<b>EventEase</b> Power Automate	<i>Automated event workflow using Microsoft Forms → Power Automate → SharePoint → Power Apps → Certificates</i> <ul style="list-style-type: none"><li>Automated personalized confirmation emails in <b>Power Automate</b>, triggered instantly on Microsoft Form submission</li><li>Built scheduled automation to update attendance via QR check-in and <b>deliver personalized certificates</b> post-event</li></ul>
Workflow Automation	<b>Visionary Agent</b> n8n AI Agent	<i>Developed a AI agent in n8n that functions as a virtual marketing team, automating end-to-end content creation</i> <ul style="list-style-type: none"><li>Built a AI marketing agent that automated creation of blogs, LinkedIn posts, videos, and image assets across channel</li><li>Optimized workflows by <b>80%</b> through integration of OpenAI, Runway, <b>11Labs</b>, and <b>G Suite</b> for real-time automation</li></ul>

## RELEVANT SKILLS AND COURSEWORK

Design Thinking Strategies for Road Safety	Machine and Deep Learning	Prompt Engineering
Computational Techniques, POE	Data Structure and Algorithm*	Data Science: Analysis & Visualisation
<b>Skills</b>	KPI & Metrics Analysis, CNNs, LSTM, NLP, RAG, Reinforcement Learning	<b>Programming Languages</b> Python, C/C++
<b>Technologies</b>	MS-Excel, Pandas, NumPy, Matplotlib, Figma, Docker, Pinecone, Flask, Scikit-learn, Seaborn, Beautifulsoup, NLTK, LangChain, LangGraph, MongoDB, Keras, TensorFlow, Postman, Git, MATLAB, PowerBI, HuggingFace, n8n, CrewAI	

## POSITIONS OF RESPONSIBILITY

<b>Quality Management System Manager</b> Shaastra <sup>5</sup> (June'24-June'25)	<ul style="list-style-type: none"><li>Orchestrated <b>ISO 9001 Certification</b> document compilation, encompassing task progress updates and action reports</li><li>Applied the <b>PDCA cycle</b> (Plan-Do-Check-Act) to define and execute tasks, ensuring systematic and efficient processes</li><li>Streamlined info-management by implementing <b>efficient data systems</b>, increasing data <b>accessibility and accuracy</b></li></ul>
<b>Publicity &amp; Marketing Coordinator</b> Shaastra (June'22 – May'24)	<ul style="list-style-type: none"><li>Identified optimal online <b>platforms</b> to effectively reach and engage <b>targeted audiences</b> for publicity of Shaastra'24</li><li>Planned and executed <b>Spark<sup>6</sup> quiz event</b> in Patna to promote Shaastra, garnering participation from <b>500+</b> students</li><li>Conducted <b>risk analysis</b> for Publicity team, gaining <b>insights</b> from all feedback on <b>20+</b> events via <b>sentiment analysis</b></li></ul>
<b>Manager</b> Entrepreneurship-Cell <sup>6</sup> (June'23-May'24)	<ul style="list-style-type: none"><li>Managed <b>media coverage</b> and created reels for Speakers, <b>boosting the E-Summit 2024<sup>7</sup></b> participation <b>across India</b></li><li>Created <b>launch videos</b>, <b>Theme concepts</b>, and merchandise, enhancing engagement and <b>branding</b> for E-Summit 24</li><li>Ensured cohesive event ambience and aesthetics for E-Summit 2024, creating a memorable attendee experience</li></ul>

## EXTRA-CURRICULARS

<b>National Cadet Corps (NCC)</b>	<ul style="list-style-type: none"><li>Earned <b>NCC 'B' certificate</b> (B grade) with the <b>Sergeant Rank</b>, demonstrating leadership, dedication, and discipline</li><li>Independence Day in 2023, our platoon at IITM <b>won</b> esteemed <b>1st prize</b> for the Best Marching among <b>8</b> platoons</li></ul>
<b>Facilitator</b>	<ul style="list-style-type: none"><li>Facilitated life skills &amp; teamwork sessions for <b>100+</b> first-year students, fostering leadership, growth &amp; collaboration</li></ul>
<b>Teaching Assistant</b>	<ul style="list-style-type: none"><li>Guided <b>12</b> mentees and collaborated with the faculty mentors to ensure smooth academic course communication</li></ul>
<b>Content Creator</b>	<ul style="list-style-type: none"><li>Directed &amp; scripted short films at <b>IITM TV</b>, managing cinematography, production, post-production &amp; storytelling</li></ul>

\*: Ongoing course | <sup>1</sup>: Bihar School Examination Board | <sup>2</sup>: Central Board of Secondary Education | <sup>3</sup>: International Research Conference. | <sup>4</sup>: Research and Development | <sup>5</sup>: Student-run technical festival of IIT Madras | <sup>6</sup>: School Outreach Program | <sup>7</sup>: Student-run annual flagship entrepreneurship fest of IIT Madras | <sup>8</sup>: The Official Media Body of IITM