

EDUCATION

Degree	Specialization	Institute	Year	CPI
B.Tech	Computer Science and Engineering	Neil Gote Institute of Technology	2022–Present	7.75
TSBIE	Physics, Chemistry & Mathematics	Narayana College	2022	9.3
SSC	–	Sri Chaitanya School	2020	10.0

WORK EXPERIENCE

- **Research Intern** [DRDO – Research Centre Imarat, Hyderabad] May–Jul 2025
 - Developed an autonomous drone navigation system using Reinforcement Learning (Proximal Policy Optimization) in the AirSim simulation environment, enabling intelligent obstacle avoidance and goal-oriented flight behavior.
 - Designed and optimized state representations, reward functions, and hyperparameters, applying data-driven experimentation to improve learning efficiency and model performance.
 - Trained and evaluated RL agents using Python and Stable-Baselines3, following end-to-end ML workflow practices including experimentation, evaluation, and iteration.
 - Implemented a modular, maintainable codebase with version control (Git), aligning with software engineering best practices for scalable AI systems.

PROJECTS

- **Transformer-Based Time Series Anomaly Detection System** [Prof.K.Ramakrishna] Nov 2024–Feb 2025
 - Developed a Transformer-based anomaly detection system for multivariate time-series data, enabling accurate identification of abnormal patterns across complex sequences.
 - Implemented and trained deep learning models using Python, TensorFlow, and PyTorch, following end-to-end ML workflows including data preprocessing, training, and evaluation.
 - Applied advanced data preprocessing and feature engineering techniques to enhance real-time anomaly detection performance and model robustness.
- **Stock Trading using Deep Reinforcement Learning (Team Lead)** Sept–Dec 2025
 - Developed an end-to-end Deep Reinforcement Learning pipeline for automated stock trading, enabling data-driven decision-making in dynamic market environments.
 - Implemented modular backend components for data ingestion, model training, evaluation, and inference using Python, following clean and scalable software design principles.
 - Structured the project as a deployable, production-style codebase, demonstrating full-stack integration and reproducible ML workflows.

CERTIFICATIONS & ACHIEVEMENTS

- **BITS TechXcelerate 2025 | BITS Pilani:** AI-based smart farming prototype.
- **Amazon Smbhav Hackathon 2024 | Amazon:** SYNKRO platform; Top 20% of 100,000+ teams.
- **Temenos TEM-(E)-THON 2025 | Temenos:** Carbon Footprint Tracker; Top 30 teams.

TECHNICAL SKILLS

- **Languages:** Python, Java, JavaScript, SQL
- **Machine Learning & AI:** Machine Learning, Deep Learning, Reinforcement Learning, NLP, Transformers, LLMs
- **Frameworks & Libraries:** TensorFlow, PyTorch, Stable-Baselines3
- **Tools:** Autodesk Inventor, Jupiter Notebook, LaTeX, VS Code, GitHub, Docker, VMware, Postman
- **Core CS:** Data Structures and Algorithms, Object-Oriented Programming, Database Management Systems