



Ladva Umanshiya Hiteshiya

Academic Details				
Year	Degree	Institute	CGPA/Marks(%)	
2026	B.Tech Artificial Intelligence	IIT Hyderabad	7.83	
2022	XII (GHSEB)	Modi Career Academy	85.53%	
2020	X (GSEB)	Saint Thomas School	86.83%	

Scholastic Achievements	
JEE Advanced AIR 2572, JEE Mains AIR 3259	2022
KVPY SX AIR 4700- Merit list	2022
GUJCET State Rank 8 - a state level competitive entrance test.	2022
AINACS GK Olympiad - Overall AINACS 2nd	2019

Skills

- Languages & Frameworks: C / C++, Python, PyTorch, TensorFlow, FastText, scikit-learn, Open Al Gym, NumPy, Pandas
- Deep Learning: CNNs, LSTMs, Transformers (BERT), REINFORCE, DQN, RCNN, Word2Vec
- NLP: Text classification, multi-label prediction, topic modelling, sentence embeddings
- Reinforcement Learning: Q-learning, Deep Q-learning, Policy Gradients, reward shaping
- Data & Tools: Jupyter, Google Colab, Git, Matplotlib, Seaborn, LaTeX, Git, GitHub.
- Evaluation & Optimization: Accuracy, Macro F1, loss function engineering, fine-tuning, experimentation
- · Domains: OCR, Education, Game AI, Retail Cybersecurity, Research Topic Modelling

Relevant Courses

- Computer Science Courses: Discrete Maths for Computer Science, Introduction to C language, Computer
 Architecture(RISC-V based), Data structures and Applications, Algorithms, Operating Systems 1(Introduction to Operating
 System, Process, Threads. etc.), Compilers-1(Basics of Compiler Design and Context Free Grammar), Database
 Management Systems.
- Core Al Courses: Probability and Random Variables, Programming for Al(libraries NumPy, pandas, SciPy etc), Matrix
 Theory, Convex Optimization, Applied Statistics, Foundations of Machine Learning, Deep Leaning, Reinforcement Learning,
 Cybersecurity and Al, Robotics, Computer Vision, Natural Language Processing, Hardware Architecture for Deep Learning.
- Basic EE Courses: Linear Systems and Signal Processing, Control Systems.
- Maths Courses: Calculus, Vector algebra, Introduction to Metric Spaces, Series of Functions, Concentration Inequalities, Numerical Analysis, Statistical Inference.

Projects

Exploring the Intersection of Quantum Computation and Artificial Intelligence: Collaborating on research under the guidance of Dr PN Karthik, uniting Quantum Computing and AI, focusing on theoretical modelling and hybrid quantum-classical approaches. Bridging quantum principles with AI to formulate novel machine learning problem statements.

Pedagogical Ability Assessment of Al-powered Tutors: Fine-tuning BERT/Transformers based models on a custom dataset of Al tutor-student dialogues to assess pedagogical effectiveness across four dimensions. Exploring advanced loss functions and knowledge integration to enhance multi-task classification performance.

Multi-label Text Classification of Research Articles: Built multi-label classifiers to predict research topics from abstracts/ titles, achieving F1-scores of 0.76 (FastText) and 0.78 (CNN-LSTM + Word2Vec). Enabled scalable academic indexing, reducing manual categorization effort by over 50%.

AI-Powered Retail Cybersecurity Threat Detection: Designed an end-to-end AI solution for anomaly and threat detection in POS systems using synthetic logs and the UNSW-NB15 dataset. Achieved 97% F1 in unsupervised anomaly detection and 0.80 F1 in supervised threat classification for enhanced enterprise security.

Scene Text Recognition using RCNN: Developed an RCNN-based deep learning model to extract text from natural images, achieving 80% accuracy on a dataset of 12.7K+ synthetic images. Enabled scalable automation of OCR tasks for use cases in signage, document parsing, and license plate recognition.

Extracurricular	
NSS Volunteer	2022-2026
 Volunteered in conducting CYBERCON 2.0 - Annual Cyber Security Event by Kludge. 	2024

German- basic language understanding and speaking

Worked as the school head boy , helped in coordinating and organising various events and competitions
 2018-2019

Positions of Responsibility

Kludge (Network and Information Security Club)

Developed and curated Capture The Flag (CTF) challenges for competitions and the club's website, enhancing members'
cybersecurity skills and gaining hands-on experience with networking concepts and Wireshark for network analysis.