Thumma Ushasree

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ACADEMIC DETAILS				
Degree	Specialization	Institute	Year	CPI/%
B.Tech.	Computer Science and Engineering	IIT Gandhinagar	2022-Present	8.28
Class XII	Physics, Chemistry and Maths	Narayana Junior College	2021-2022	98.7
Class X	- 0	JNV Rangareddy	2019-2020	96.2

INTERNSHIPS

• AI Intern, L&T Technology Services (LTTS)

[May '25 - July '25]

(Dr. Kaushik Halder, LTTS)

- Implemented Multi-Agent PPO (MAPPO) for scalable reinforcement learning policy optimization.
- o Designed a data-driven maintenance risk prediction model, improving industrial uptime and resource efficiency.

PROJECTS

• OlympiaTrack: Sports Management System

[Jan '25 - April '25]

(Prof. Yogesh Kumar Meena, IIT Gandhinagar) | Project Link

- o Developed secure RESTful APIs using Flask & MySQL with role-based access control and session validation.
- Ensured **data integrity** and audit logging to prevent unauthorized modifications.

• Critical Infrastructure Monitoring Framework

[Jan '25 - April '25]

(Prof. Sameer Kulkarni, IIT Gandhinagar) | Project Link

- o Developed a multithreaded Python monitoring framework supporting HTTP, DNS, SSL, and latency checks.
- Integrated MySQL logging and automated alerts for persistent metrics and proactive incident detection.
- o Built a Streamlit dashboard visualizing uptime, response time, latency, and packet loss for real-time monitoring.

• ATM Communication Protocol

[Sep '24 - Nov '24]

(Prof. Abhishek Bichawat, IIT Gandhinagar) | Project Link

- Built a **secure ATM protocol in C++** with socket programming for real-time banking transactions.
- o Integrated SSL/TLS and AES encryption to ensure secure authentication and data transmission.
- Designed a multi-user file-based account system for scalable transaction handling.

• Lightweight DBMS with B+ Tree Index

[April '25]

(Prof. Yogesh Kumar Meena, IIT Gandhinagar) | Project Link

- Implemented a **Python-based lightweight DBMS** with a custom B+ Tree for efficient data storage and query processing.
- Ensured database persistence for secure storage and tested performance against brute-force methods.

RELEVANT COURSEWORK

- Systems & Software: Databases, Operating Systems, Computer Networks, Computer Networks & Security, Software Tools & Techniques, Computer Organization & Architecture, Digital Systems, Data-Centric Computing
- Theory & Programming: Data Structures and Algorithms I & II, Discrete Mathematics, Theory of Computing, Probability, Statistics & Data Visualization

TECHNICAL SKILLS

- **Programming:** Python, C
- Web & Tools: HTML, CSS, JavaScript, Flask, Streamlit, Linux (WSL), Docker, Git
- Databases: MySQL

ACHIEVEMENTS

- Recognized on the **Dean's list** for exhibiting exemplary academic performance in Semester 1 with a CPI of 8.8.
- Awarded Best Project for "Two Cars" Game Implementation on Basys3, surpassing 13 competitors.
- Selected as a **Reliance Foundation Undergraduate Scholar** (Top 5000 out of 40,000 applicants).
- Achieved 1st position in the Volleyball Association of Gandhinagar District Championship 2023-24.
- NCC A Certificate holder Demonstrated leadership, discipline, and commitment to national service.

EXTRA-CURRICULAR ACTIVITIES

- Volleyball player
 - o Competed for IIT Gandhinagar at the Inter-IIT Sports Meet 2023, hosted by IIT Bombay.
 - o Contributed significantly to team performance and represented IIT Gandhinagar in intercollegiate tournaments.