



Aashcharya Gorakh

Roll No.:B23ES1001

B.Tech

Majors in Computer Science

Indian Institute Of Technology, Jodhpur

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Portfolio

Github | LinkedIn

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech.	Indian Institute Of Technology, Jodhpur	7.67	2023 - 2027
Higher Secondary	School of Scholars, Nagpur (CBSE)	88.4%	2023
Secondary	Bhavan's B.P. Vidya Mandir, Ashti (CBSE)	94.2%	2021

EXPERIENCE

- **CyberUltron Pvt. Ltd.**

Software Development Intern / Remote Oct 2025 - Present

- Engineered an event-driven microservices architecture (**FastAPI**, Celery), integrating **Redis message queues** to reduce security scan dispatch latency by 40% under production loads.
- Built a threat analysis engine leveraging **Polyglot Persistence** (**PostgreSQL**, **MongoDB**) and **Elasticsearch**, improving data retrieval performance by 50% at scale through advanced indexing and **LLM-based query parsing**.

PROJECTS

- **CHEST X-RAY PATHOLOGY LOCALIZATION** | [GITHUB ↗](#)

Prof. Pratik Mazumdar / Research Project

Aug 2025 - Nov 2025

- Architected a **Multimodal U-Net** fusing **ResNet34** and **512-dimensional CLIP embeddings**, achieving **89% Dice Score** by utilizing **semantic feature concatenation** to automate pathology segmentation from unstructured text.
- Optimized a **Self-Supervised Autoencoder pipeline** on **7,400+ unlabeled X-rays**, reducing required labeled data by 96% (utilizing only **240 samples**) while accelerating model convergence by 40% via **Transfer Learning**.

- **SKELETON-AWARE DEEP MOTION RETARGETING** | [GITHUB ↗](#)

Prof. Avinash Sharma / Design Credit Project

Jun 2025 - Jul 2025

- Developed a **Graph Neural Network (GNN)** based retargeting system, enforcing **end-effector kinematic consistency** to preserve **95% motion fidelity** across **29 heterogeneous rig topologies**.
- Streamlined the latent space representation processing **2,400 Mixamo clips**, slashing normalized error by 2.3×10^3 and enabling **real-time inference** capabilities through rigorous **hyperparameter tuning**.

- **DYNAMIC LOAN GRAPH** | [GITHUB ↗](#) | [VISUALIZER ↗](#)

Prof. Suchetana Chakraborty / DSA Project

Mar 2025 - Apr 2025

- Formulated a high-frequency **debt simplification engine** by benchmarking **Dijkstra** and **Bellman-Ford heuristics**, cutting graph complexity by **60%** and attaining **0.1ms execution latency** on **1,000+ node networks**.
- Devised an interactive **financial topology visualizer** utilizing **greedy optimization strategies** and **Graphviz**, successfully identifying critical settlement nodes with **95% accuracy**.

TECHNICAL SKILLS

- **Programming Languages:** C/C++, Python, Javascript, SQL, HTML, CSS.
- **Machine Learning Tools:** NumPy, Pandas, Matplotlib, Seaborn, Scikit Learn, Pytorch, Mediapipe, Langchain.
- **Development Tools & Others:** Git/Github, System Design, OOPs, Docker, CI/CD pipelines, Bash, Jupyter Notebooks, Google Colab, VS Code, Linux, Firebase, MATLAB, Blender.
- **Coursework:** Data Structures and Algorithms(A Grade), Machine Learning(A Grade), Probability and Statistics(A- Grade), Linear Algebra(A- Grade), Database Systems, Operating Systems, Computer Architecture.

LINKS

Leetcode: [aashcharya ↗](#) Codeforces: [aashcharyagorakh ↗](#) GFG: [aashcharya10 ↗](#)

ACHIEVEMENTS

- Solved **1000+ Data Structures & Algorithms** problems across leading platforms (LeetCode, Codeforces, etc.).
- National Semi-Finalist in **Flipkart GRID 7.0**.
- Ranked **808th Globally** in **Round 1** and **1572nd Globally** in **Round 2** of **Meta Hackercup 2025** .
- Expert on Codeforces with **Maximum rating 1634**.
- Achieved a **Global rank of 469** among **41k+ participants** in Codeforces Round 1042.
- **Global Top 2% rated Knight** on LeetCode (**Maximum Rating: 2011**).
- Acquired **49 global rank out of 35K+ participants** in LeetCode Weekly Coding Contest 466.
- **Branch Changed** at the end of first year in college.
- Secured **15K rank** in JEE Advanced among **1.2M+ participants** (**Top 1.25%**) and **97.25%ile (31k rank)** in JEE Mains.

EXTRACURRICULAR

Programming Society | Core Member

Prometeo'25 | Marketing Assistant Head