Aashcharya Gorakh

Roll No.:B23ES1001
B.Tech
Majors in Computer Science
Indian Institute Of Technology, Jodhpur

+91 9595914199
aashcharyagorakh@gmail.com
b23es1001@iitj.ac.in
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: **aashcharya1o**

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** .
- **Specialist** on Codeforces with **Maximum rating 1546**.
- Achieved a **Global rank of 469** among **41k+ participants** in Codeforces Round 1042.
- **Global Top 3% rated Knight** on LeetCode **(Max Rating: 1964)**.
- 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