Imaad Hasan

 github.com/ImaadHasan2002 | linkedin.com/in/ImaadHasan | imaadhasan16@gmail.com | (+91)8265938556

WORK EXPERIENCE

STARlab Capital — Peoria, Illinois
AI Research Engineer (Full-time) — *July 2025 – Present*
- Leading R&D for ViviSTAR, an AI-driven histopathology platform for glioma based cancer diagnostics (in collaboration with UIUC)
- Developed self-supervised pipelines implementing state-of-the-art algorithms for feature extraction from WSIs.
- Optimized large-scale slide visualization, reducing compute time by 90% and enabling efficient cloud deployment.
- Built graph-based biomedical retrieval pipelines for large-scale LLM pretraining and maintained research documentation.

Zenon Analytics — Noida
Predictive Software Intern — *Jun 2024 – Aug 2024*
- Received a <u>Letter of Recommendation</u> for valuable contributions.
- Optimized the feature engineering pipeline, reducing processing time by 15%.
- Researched and implemented model interpretability techniques, integrating an explainability layer into the automated ML pipeline.

PROJECTS

Development of a Low-Code Chatbot Builder | *Python, Langchain, LLMs* — Sept 2024 – June 2025
- Designed and developed a low-code chatbot builder platform using a Retrieval-Augmented Generation (RAG) architecture integrated with large language models (LLMs).
- Built a flexible, generalized pipeline to cater to diverse industry use cases, ensuring adaptability and scalability.

Multimodal AI Approach for Ophthalmic Disease Detection | *TensorFlow, Flask* — Feb 2024 – May 2024
- Developed a multi-modal AI system integrating deep learning models for ophthalmic disease detection using fundus images, enhancing diagnostic accuracy.
- Implemented a Flask-based backend for seamless patient data and image processing, enabling reliable classification and AI-generated diagnostic reports.

Road Segmentation and Object Detection | *PyTorch, ResNet101, YOLOv8, Git, Spyder* — Feb 2023 – May 2023
- Developed a deep learning-based system for lane and object detection in semi-urban environments, improving autonomous vehicle perception.
- Used ResNet101 for semantic segmentation and YOLOv8 for object detection, achieving accurate scene understanding and hazard identification.

EDUCATION

Aligarh Muslim University — July 2025
Bachelor of Technology - B.Tech, Artificial Intelligence — *GPA: 3.38* — **GATE Qualified (2025)**
- **Relevant Coursework:** Machine Learning, Artificial Intelligence, Deep Learning, Natural Language Processing, Reinforcement Learning, Recommender Systems, Image and Video Processing, Data Visualization, Linear Algebra, Calculus.

Sayyid Hamid Senior Secondary School — July 2021
Senior Secondary Physics, Chemistry & Mathematics (Class XII) — *Percentage: 92.8%*

Our Lady of Fatima Secondary School — April 2019
Secondary Certificate (Class X) — *Percentage: 90.8%*

SKILLS

Languages: Python, SQL, C/C++, HTML/CSS, JavaScript, LaTeX

Tools: VS Code, Jupyter, Spyder, Git/GitHub, Linux, Excel, Power BI, Tableau, Pyspark, Apache Hadoop, AWS

Frameworks: Langchain, Flask, Tensorflow, Pytorch, FastAPI, Django, Streamlit

Libraries: Pandas, NumPy, Matplotlib, Scikit-Learn, Plotly, OpenCV

POSITIONS OF RESPONSIBILITY

AMU Machine Learning Club | *Secretary* — Apr 2024 – June 2025
- Organized the first annual fest of AMU ML Club, *"STELLAR"* (event summary link).
- Co-founded the AMU ML Club, leading workshops on Python, Machine Learning, and Responsible AI for 100+ students.