Ameen Ur Rehman

💌 ameen/Email 🧥 ameen/Portfolio 🛗 ameen/LinkedIn 🗘 ameen/Github

Education

Jamia Hamdard Aug 2021 - July 2025

Bachelor of Technology in Computer Science and Engineering

Grade: First Division with Distinction

Jamia Millia Islamia May 2019 - Aug 2021

Senior Secondary School, Major in Physics, Chemistry, and Mathematics, GPA: 9.6

New Delhi. India

New Delhi, India

Experience

Research Intern Feb 24 - Present

MARL lab, University of Maryland

Remote, Baltimore, MD

- Reduced loading time by 20% and improved robustness of the curriculum by refining the PLR.
- Exploring support and developing initial examples for multi-agent PettingZoo environments within Syllabus.
- Developing "Syllabus," an API for designing curricula for reinforcement learning agents, and a framework for synchronizing those curricula across environments running in multiple processes.

Research Intern Aug 23 - Jan 24

Jamia Millia Islamia

New Delhi, IND

- Engineered a model achieving 71% accuracy in Multilingual Sentiment Analysis, using TensorFlow transformers.
- Executed rigorous experimentation and parameter optimization, resulting in a notable 27% benchmark enhancement, leveraging Sentimix-Hinglish research datasets.
- Pioneered brainstorming sessions, leading the exploration and refinement of two novel NLP projects integrating transformer methodologies, while delving into the intricate nuances of LLMs.

Research Intern Aug 23 - Oct 23

UP Lab, University of Surrey

Remote, Guildford, UK

- Tasked with deploying models on Hugging Face for developer access and research resources.
- Efficiently trained URBAN-SED Dataset model, systematically reviewed, and promptly resolved 10+ codebase issues.
- Explored various Hugging Face resources to enhance AI deployment and updates knowledge-sharing sessions.

Student Research Assistant

Feb 23 - Jul 23

Jamia Hamdard

New Delhi, India

- Propelled the frontier of stock price prediction by integrating intricate deep reinforcement learning paradigms with intricate market behaviors, fostering a paradigm shift in predictive analytics.
- Revitalized 14 trials, driving an 8% surge in forecasting precision.
- Enhanced the creation of 5 research reports and presentations, condensing findings and recommendations, leading to a significant 40% improvement in report quality and overall impact.

Publications

- A. U. Rehman, A. Ahmed, A. Sadiq, (2024). "Book Chapter: Advances in AI for Healthcare Applications.", abstract accepted, chapter under-review CRC Press (Taylor and Francis).
- A. U. Rehman (2024). "Synergetic Intelligence: A Multi-Agent Learning Framework for Sustainable Healthcare Computing.", accepted at ICIDSSD24.
- U. Rawat, Abhishek, H. Singh, A. U. Rehman, (2024). Book Chapter: Cybersecurity challenges and risks in AGI development and deployment.", Springer.
- A. U. Rehman, A. Javed, and A. N. et al. (2023). "Enhancing Stock Price Prediction with Deep Reinforcement Learning: A Time Series Analysis Approach", ICSTAICE, **DOI**.
- A. U. Rehman, (2023). "A Comparative Study of Deep Reinforcement Learning in Robotics", presented at International Journal of Engineering Sciences and Emerging Technologies (IJESET), **DOI**.

Technical Skills

Languages: Python, C++, C, HTML, CSS, JavaScript, Go.

Frameworks: Scikit, TensorFlow, Keras, PyTorch, OpenCV, Flask, NodeJS.

Developer Tools: Google Colab, Jupyter, PyCharm, VSCode, OverLeaf, Docker, Github. Canva, Postman.

Technologies: ChatGPT, Bard, Git, PowerBI, AWS, WordPress.

Database: SQL, MySQL, PostgreSQL.

Platform: Linux, Windows.

Agriculus | Python, XGBoost, Deep Learning, SVM, HTML, CSS, JavaScript, Firebase, Kotlin, MVM

- Orchestrated the development of a precision agriculture solution, achieving a stellar 99.3% XGBoost accuracy and disseminating sustainable farming insights via a widely-followed blog, amassing over 100+ monthly readers.
- Enhanced Agriculus reach with Android and web versions, serving farmers and researchers, while winning multiple hackathons and prestigious awards, validating its innovation in agriculture.

ML Playground | Machine Learning, Python, Scikit learn, Web Development

- Established an Open Source GitHub repository with 12+ ML projects offering a 65% boost in practical examples.
- Ignited a vibrant ML community, hosting biweekly workshops with 200+ enthusiasts, fostering collaboration and innovation.

OpenCV Kit | Python, OpenCV, Machine Learning, Mediapipe, Streamlit, CSS, JavaScript

- Curated a diverse repository of real-world projects exploring deep learning and OpenCV, empowering enthusiasts.
- Championed the creation of innovative image processing algorithms, striving to integrate with YOLO versions and other cutting-edge technologies, resulting in a 7% performance enhancement.

Leadership and Mentorship Experience

Student Ambassador

Aug 23 - Present

Microsoft Learn Student Ambassador

• Actively contributed to the advancement of Microsoft technologies. My focus on mentorship and collaborative feedback reflects my dedication to fostering personal and community growth in the tech space.

Machine Learning and Artificial Intelligence Lead

May 22 - Aug 23

Google Developer Student Club

• Led Machine Learning and AI initiatives, boosting student participation by 30%, enhancing knowledge-sharing by 25%, and completing 8 domain-specific projects, vital for GDSC's growth.

Machine Learning and Artificial Intelligence Mentor

Dec 22 - Jan 23

IIT Kharagpur Open Source Society

• Guided 60+ students, fostering innovation and boosting engagement by 25% through facilitated knowledge sharing, supporting 20+ open-source contributions.

Conferences and Workshops Attended

7th Summer School on AI | International Institute of Information Technology Hyderabad

Aug

• Selected as one of 30 out of 5K+ applicants for the 7th AI Summer School, specializing in Computer Vision and Machine Learning, with immersive training.

Robotics and AI Summer School | Institut de Robòtica i Informàtica Industrial, Spain

 \mathbf{Jul}

• Mastered AI theory and hands-on practice through personalized mentorship, cultivating lasting relationships with peers, renowned speakers, and industry experts.

International Conference IIRA 3.0 | Moradabad Institute of Technology, Moradabad

 \mathbf{Jul}

• Showcased innovative research at the International Conference on Innovation in IoT, Robotics, and Automation, fostering cross-border partnerships and staying updated on industry trends.

Achievements

- Winner of Hack-A-Thon from 45+ Universities for AI/ML Domain.
- Winner of Internal Hackathon of Smart India Hackathon (SIH) 2023.
- Finalist of HackJNU 3.0 from 55+ Universities for AI/ML Domain.
- Fellow of Season 3 The Nights and Weekends at **buildspace**.
- IEEE Tech-Member Advisor and ML/AI Mentor HackClub at Jamia Hamdard.
- Angel Hack Campus Ambassador and LinkedIn Talent Community Fellow.
- Data Scientist with Python Track [Certification by DataCamp].