# Ameen Ur Rehman

■ ameensadiya12345@gmail.com 😭 www.ameen.com 🛅 ameen.linkedIn.com 🗘 ameen.github.com

# Education

# Jamia Hamdard University

Aug 2021 - July 2025

New Delhi, India

Grade: First Division with Distinction

Bachelor of Technology in Computer Science and Engineering

Experience

Research Intern

Jun 24 – Sep 24

MACSSL lab, Koc University

Istanbul, TR

- Engineering a model from 50k+ WHO literature pages to predict sentiments, conditions, and exemptions.
- Creating a scalable ML model integrating 25+ variables for precise predictions.
- Built an NLP tool that examined 1200+ WHO Executive Board meeting minutes, detecting alliances, stances, and member sentiments based on earmarking keywords.

Research Intern Feb 24 – July 24

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 designing initial examples for 4+ multi-agent 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. [LOR]

Research Intern Aug 23 – Oct 23

UP Lab, University of Surrey

Remote, Guildford, UK

- Tasked with deploying model on Hugging Face for developer access and research resources.
- Efficiently trained URBAN-SED Dataset model, systematically reviewed, and promptly resolved 10+ codebase issues.
- Explored 20+ Hugging Face resources to enhance AI deployment and updates knowledge-sharing sessions.

#### Undergraduate Research Assistant

Feb 23 - Jun 23

Jamia Hamdard

New Delhi. IND

- Engaged in an in-depth and systematic literature review, precisely gathering a total of 27 research papers addressing deep reinforcement learning, with a specific focus on elevating the precision of stock price predictions.
- Undertook 14 data-driven trials, yielding a significant 8% increase in the precision of forecasting stock prices.
- Improved upon the creation of 5 research reports and presentations, adeptly condensing findings and recommendations, leading to a notable 60% enhancement in report quality and overall impact.

## **Publications**

- R. Sullivan, R. Pégoud, and A. U. Rehman, et al, (2024). "Syllabus: Curriculum Learning Made Easy.", research paper under-review at Neural Information Processing Systems (NeurIPS).
- A. U. Rehman, Abuzar, D. Nadeem, (2024). "Book Chapter: Advances in AI for Healthcare Applications.", abstract accepted, chapter under-review CRC Press (Taylor and Francis).
- A. U. Rehman, A. Ahmed, and A. Sadiq, et al, (2024). "Synergetic Intelligence: A Multi-Agent Learning Framework for Sustainable Healthcare Computing.", accepted at ICIDSSD 24.
- U. Rawat, Abhishek, H. Singh, A. U. Rehman, (2024). "Book Chapter: Cybersecurity challenges and risks in AGI development and deployment.", published at Springer, DOI.
- A. U. Rehman, T. Majid, and A. Javed, 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.

## **Projects**

Agriculus | Python, XGBoost, Deep Learning, SVM, HTML, CSS, JavaScript | Repo Link

- \* Developed a precision agriculture solution with 99.3% XGBoost accuracy and 98% accuracy using a deep learning RNN model; shared sustainable farming insights through a blog.
- \* Expanded Agriculus with Android and web versions, winning multiple hackathons and awards for innovation.

#### ML Playground | Machine Learning, Python, Scikit learn, Web Development | Repo Link

- \* 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 | Repo Link

- \* 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.

## 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.
- AI/ML lead at Google Developer Student Club JH.
- Participant at Robotics and AI Summer School | Institut de Robòtica i Informàtica Industrial, Spain.
- IEEE Tech-Member Advisor and ML/AI Mentor HackClub at Jamia Hamdard.