Azal Ahmad Khan

Indian Institute of Technology (IIT), Guwahati

B.Tech., Chemical Science and Technology

> Amazon ML Systems Fellow (2025) & GAGE Fellow (2024)

Research Experience

NEC Laboratories America, San Jose, CA
Research Intern with Vijay Kumar & Manmohan Chandrakar

University of Minnesota, Twin-Cities, MN
Graduate Assistant with Ali Anwar

University of Minnesota.
Research Intern with Ali Anwar

University of New South Wales.

05/2025 – 08/2025

09/2024 – 12/2024

09/2024 – 12/2024

01/2022 – 05/2024

Awards & Grants

Amazon Machine Learning System Fellowship.
 University of Minnesota GAGE Fellowship.
 Travel Grant, Google Research Week.
 Highly Commended (Top 10%), Global Undergraduate Research Award 2024.

Publications & Pre-prints

Research Intern with Rohitash Chandra

* Equal Contribution

NeurIPS '25 Beyond Expectations: Quantile-Guided Alignment for Risk-Calibrated Language Models

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Xinran Wang, Jin Du, **Azal Ahmad Khan**, Qi Le, Enmao Diao, Jiawei Zhou, Jie Ding, Ali Anwar.

The 39th Conference on Neural Information Processing Systems, 2025. Spotlight (Top 3.1%)

EMNLP '25 Accelerating LLM Reasoning via Early Rejection with Partial Reward Modeling Seyyed Saeid Cheshmi*, Azal Ahmad Khan*, Xinran Wang, Zirui Liu, Ali Anwar. In Proceedings of Findings of EMNLP 2025.

arXiv Sem-DPO: Mitigating Semantic Inconsistency in Preference Optimization for Prompt Engineering

Anas Mohamed*, **Azal Ahmad Khan***, Xinran Wang, Ahmad Faraz Khan, Shuwen Ge, Saman Bahzad Khan, Ayaan Ahmad, Ali Anwar. *Pre-print*.

IROS '25 **Safety Aware Task Planning via Large Language Models in Robotics Azal Ahmad Khan***, Michael Andrev*, Muhammad Ali Murtaza, Sergio Aguilera, Rui Zhang, Jie Ding, Seth Hutchinson, Ali Anwar.

- In the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2025.
- arXiv LADs: Leveraging LLMs for AI-Driven DevOps
 Ahmad Faraz Khan*, Azal Ahmad Khan*, Anas Mohamed, Haider Ali, Suchithra Moolinti, Sabaat Haroon, Usman Tahir, Mattia Fazzini, Ali R. Butt, Ali Anwar.

 Pre-print.
- IPDPS '25 IP-FL: Incentivized and Personalized Federated Learning
 Ahmad Faraz Khan, Xinran Wang, Qi Le, Zain ul Abdeen, Azal Ahmad Khan, Haider Ali,
 Ming Jin, Jie Ding, Ali Butt, Ali Anwar.
 In Proceedings of the 39th IEEE International Parallel & Distributed Processing Symposium.
- EuroSys '24 FLOAT: Federated Learning Optimizations with Automated Tuning
 Ahmad Faraz Khan, Azal Ahmad Khan, Ahmed M Abdelmoniem, Samuel Fountain, Ali
 Butt, Ali Anwar.
 In Proceedings of the Nineteenth European Conference on Computer Systems.
- BigData '24 Personalized Federated Learning Techniques: Empirical Analysis Azal Ahmad Khan, Ahmad Faraz Khan, Haider Ali, Ali Anwar.

 In IEEE International Conference on Big Data 2024 (Short Paper).
- BigData '24 Mitigating Sycophancy in Large Language Models via Direct Preference Optimization Azal Ahmad Khan, Sayan Alam, Xinran Wang, Ahmad Faraz Khan, Debanga Raj Neog, and Ali Anwar.

 In IEEE International Conference on Big Data 2024 (Short Paper).
 - Elsevier A review of ensemble learning and data augmentation models for class imbalanced problems: combination, implementation and evaluation

 Azal Ahmad Khan, Omkar Chaudhari, Rohitash Chandra.
 - Expert Systems with Applications, Volume 244, 122778.
 - MDPI A Quantum-Inspired Predator-Prey Algorithm for Real-Parameter Optimization Azal Ahmad Khan, Salman Hussain, Rohitash Chandra.

 Algorithms 2024, 17(1), 33.

Technical Skills

Programming Python, C/C++ Web Technologies FastAPI LLM Libraries and Frameworks LangChain, Ollama, OpenAI, AutoGen, Hugging Face, Agno ML Tools Pandas, Numpy, Scipy, Matplotlib, Scikit-learn, Tensorflow, Pytorch, OpenCV Miscellaneous Git, GitHub, SQL, LATEX