AMANUL HAQUE

https://ahaque2.github.io/ | amanul.003@gmail.com |+1(919)-946-6094

OVERVIEW

AI Researcher with a strong foundation in generative AI (LLMs), vector embedding spaces, and multi-agent simulations. Passionate about developing scalable and interpretable AI solutions for real-world problems. Published in leading venues including ACL, AAMAS, IEEE-TCSS, and AI & Society. Visit my Google Scholar or my Webpage for more details.

EDUCATION

Doctor of Philosophy (PhD) in Computer Science • *CGPA - **4.0/4*** *March 2025*
North Carolina State University, Raleigh, NC (advisor: Distinguished Prof Munindar P. Singh)
Dissertation: *News Networks and Narratives: Language Models and Social Simulations*

Master of Science in Computer Science • *CGPA - **4.0/4*** *May 2019*
North Carolina State University, Raleigh, NC (advisor: Dr. Collin F. Lynch)
Thesis: *Prioritizing Online Discussion Forum Posts Using Linguistic Features With Limited Labelled Instances*

Bachelor of Engineering in Information Science • *CGPA - **8.76/10*** *May 2015*
PES University, Bangalore, India

PROFESSIONAL EXPERIENCE

Data Scientist III - *LexisNexis (Nexis + AI), Raleigh* ***April 2025 - Present***
- Designed and implemented a scalable homonym-aware entity deduplication algorithm, expanding coverage by 15×
- Designed a RAG evaluation framework to assess retrieval quality and answer generation for context engineering

Summer Research Scholar at SCADs - *Laboratory of Analytical Science (LAS), Raleigh* ***June 2024 - July 2024***
- Developed a multi-agent LLM-based abstractive summarizer and deployed LLM-as-a-judge for scalable evaluation
- Demonstrated that multi-agent small models yield more balanced summaries than single large models

Machine Learning Summer Intern - *Coupang, Mountain View* ***May 2022 - Aug 2022***
- Improved Coupang's Deep & Cross Network (DCN) model's efficiency by identifying and removing spurious features
- Automated benchmarking and built reusable scripts to streamline experiment reproducibility and comparison

Machine Learning Summer Intern - *Seagate, Longmont* ***May 2020 - Aug 2020***
- Designed a graph-based, unsupervised multi-document abstractive summarizer for a social listening app
- Built an unsupervised aspect-based sentiment analyzer to compare sentiments across online user reviews

Computer Science Summer Intern - *Lenovo, Morrisville* ***May 2018 - Aug 2018***
- Built a log-driven test case prioritization algorithm to identify high failure risk test cases to optimize test execution
- Reduced manual efforts in testing by automating the extraction of executable commands from test specifications

Member of Technical Staff - *Oracle, Bangalore* ***July 2015 - June 2017***
- Designed and developed Service Deployment Infrastructure (SDI) modules for Oracle Public Cloud (OPC)
- Implemented modules for a data center-level load balancer that reduced runtime by 50%

AWARDS AND HONORS

- Graduate Student Leadership Award 2023 *Awarded by NC State University*
- Outstanding Teaching Assistant Award 2021 *Awarded by NC State University*

SKILLS

- Programming Languages: Python, Java, Shell, SQL, PHP, HTML, JavaScript
- API and Libraries: PyTorch, Tensorflow, Langchain, Huggingface, Scikit-learn, Gensim, Numpy, Pandas

LEADERSHIP & COMMUNITY SERVICES

- Reviewed research papers for leading conferences and journals, including ACL, ACM-TIST, AAAI, and AAMAS
- President and Head of Events for the Indian Graduate Student Association (IGSA), NCSU *www.maitrincsu.org*
- Organizer and Host for the AI in Society Seminar Series at NC State University *Talks available on YouTube*
- Mentored several graduate students at NC State University in their research