

Monoshiz Mahbub Khan

monoshizmk@gmail.com

[Personal website](#) ◇ [LinkedIn profile](#)

Available from September 2026

EDUCATION

PhD in Computing and Information Sciences
Rochester Institute of Technology
August 2021 - August 2026
CGPA: 3.93 (out of 4.00)

BSc in Computer Science and Engineering
University of Dhaka
January 2016 - January 2020
CGPA: 3.55 (out of 4.00)

PUBLICATIONS

- Khan, M. M., & Yu, Z. (2024). [Approaching Code Search for Python as a Translation Retrieval Problem with Dual Encoders](#). *Empirical Software Engineering*, 30(1), 1-28. DOI: 10.1007/s10664-w024-10580-3
- Khan, M. M., Xi, X., Meneely, A., Tang, Y. & Yu, Z. [Efficient Story Point Estimation With Comparative Learning](#). arXiv preprint arXiv:2507.14642 (2026).
- Bethi, M. R., Jhade, S. R., Yaganti, P., Khan, M. M., & Yu, Z. [Modeling Art Evaluations from Comparative Judgments: A Deep Learning Approach to Predicting Aesthetic Preferences](#). arXiv preprint arXiv:2602.00394 (2026).
- Minni, K., Zhang, Q., Khan, M. M., & Yu, Z. [Modeling Image-Caption Rating from Comparative Judgments](#). arXiv preprint arXiv:2602.00381 (2026).

WORK EXPERIENCE

- **Intern** **June 2024 - August 2024**
ABB
Mannheim, Germany
 - Developed an end-to-end NER/Classification pipeline as an internal support tool for mechanical engineers. Used a combination of traditional NLP and ML methods, and contemporary deep learning models.
 - Final NER model showed an improvement in F-1 score of **0.36** over the initial NER model.
 - Used various tools including PyTorch, spaCy, scikit-learn, Hugging Face, MLflow.
 - Conducted as part of the **DAAD RISE Professional Program 2024**.
- **Graduate Research Assistant** **August-December in 2021-2023, 2024, 2025**
Lab of Human-In-the-Loop Software Engineering
Rochester Institute of Technology
Supervisor: Dr. Zhe Yu
 - Conducted research on **Code Search** to build a tool to retrieve the most relevant code snippets based on a text query. The model showed an average improvement of **10.03%** over state-of-the-art methods in terms of MRR scores. This work was published in EMSE and presented at FSE 2025.
 - Conducted research on **Comparative Learning** to propose a comparative framework for agile story point estimation to predict more accurate sorted list of user stories. This framework showed an average increase of **21.84%** in Spearmans rank correlation coefficient scores.
 - Also explored research involving explainable AI and image classification.
 - Served as **Graduate mentor** for **REU Site: Trustworthy AI Workshop 2025**.
 - Mentored Masters students on thesis projects, helping extending them to submissions for peer-review.
- **Graduate Teaching Assistant**
Rochester Institute of Technology
 - **IDAI-710: Fundamentals of Machine Learning** **IDAI-720: Research Methods for Artificial Intelligence**
January-May in 2025, 2026 January-May 2024

TECHNICAL STRENGTHS

Programming languages	Python, Java, R, C, C++, JavaScript
Machine Learning & AI	TensorFlow, Keras, PyTorch, scikit-learn, LLM fine-tuning, RAG
MLOps & Data Engineering	MLflow, Airflow, PySpark, Docker
Frameworks & Databases	Flask, Spring, Angular, SQL (Oracle, SQLite), NoSQL (MongoDB)
Tools & Methodologies	Git (GitHub, Azure DevOps), LaTeX, Agile, Scrum


Signature