

Kazi Amit Hasan

PhD student, School of Computing
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Research Interests

Software Engineering, Empirical Software Engineering, Mining Software Repositories, Software Analytics, Data Mining, Machine Learning

Education

- **Queen's University**, Kingston, ON, Canada
Ph.D. in Computing, GPA: 4.3/4.3 May 2023 – Present
- Supervisors: Dr. Yuan Tian and Dr. Steven Ding
- **Queen's University**, Kingston, ON, Canada
Master's of Science (research-based) in Computing September 2022 – May 2023
- Supervisors: Dr. Yuan Tian and Dr. Steven Ding
- **Promoted directly to doctoral program from MSc.**
- **Rajshahi University of Engineering and Technology (RUET)**, Rajshahi, Bangladesh
BSc. in Computer Science and Engineering, January 2016 – January 2021

Experience

- **Bid Optimization Analyst** (Part-time), Louis W Bray Construction Limited August 2024 – Present
Ontario, Canada
- Conducted data-driven analysis to assess market trends and provide recommendations for bid submissions.
- Leveraged data analytics to support business operations, driving efficiency and optimizing key processes.
- **Mitacs BSI Internship**, Louis W Bray Construction Limited October 2023 – May 2024
Ontario, Canada
- Worked as an Data Scientist Intern.
- Analyzed tender information and developed an integrated insight dashboard and predictive model to enhance business operations and optimize bidding strategies.
- **Graduate Teaching Assistant**, Queen's University January 2023 – Present
Kingston, Canada
- **Machine Learning Engineer**, Advanced Chemical Industries (ACI Limited) February 2021 – July 2022
Dhaka, Bangladesh
- Developed a Social Media Analytics tool, boosting audience engagement by analyzing their sentiment towards products which resulted a 15% increase in brand engagement.
- Built a customer segmentation model using RFM analysis, enhancing targeted campaigns and raising conversion rates by 18%.
- Engineered a recommendation system that increased cross-segment sales by 12%, leveraging customer purchase patterns.
- Designed predictive models to identify emerging doctors from FourP data, increasing new client acquisition by 10%.
- Created ML-powered dashboards for credit risk analysis, cutting default rates by 7% and refining loan approval processes.
- Implemented sales trend analysis using fbprophet in Power BI, enabling strategy shifts that lifted annual revenue by 20%.
- Provided strategic insights with advanced Power BI analytics, guiding data-driven decisions across business units.

Publications

Journal Paper

- J1. [EMSE-24] Huizi Hao, **Kazi Amit Hasan**, Hong Qin, Yuan Tian, Ahmed E. Hassan. "A First Look at Developers' Shared Conversations with ChatGPT in GitHub Issues and Pull Requests." Empirical Software Engineering (EMSE)

Peer Reviewed Conference Papers

- C1. [HSCE&CS 2024] **Kazi Amit Hasan**, Vu Thanh Loc Mai, Cynthia Wang, Yuan Tian, Steven H. H. Ding. "A First Look at Self-Admitted Miscommunications in GitHub Issues." In *2024 Workshop on Human-Centric Software Engineering and Cyber Security (HSCE&CS 2024)*.
- C2. [SSCI 2023] Nafiz Sadman, **Kazi Amit Hasan**, Elyas Rashno, Furkan Alaca, Yuan Tian, Farhana Zulkernine. "Vulnerability of Open-Source Face Recognition Systems to Blackbox Attacks: A Case Study with InsightFace." In *2023 IEEE Symposium Series on Computational Intelligence (SSCI 2023)*.
- C3. [MSR 2023] **Kazi Amit Hasan**, Marcos Macedo, Yuan Tian, Bram Adams, Ding Steven H. "Understanding the Time to First Response in GitHub Pull Requests." In *20th International Conference on Mining Software Repositories (MSR 2023)*

Developed Software/Tools for SE Research

- T1. **PR-Accelerator** May 2023
- Associated with "Understanding the Time to First Response In GitHub Pull Requests" (MSR 2023) work and it reports analytics and information regarding pull requests (PRs) and points out the delays in first response.
- T2. **PR-Stats** January 2023
- An open-source python library which brings different stats about pull requests.
- T3. **Data Inspector** August 2021
- A tool which brings a total of 15 essential exploratory data analysis, data cleaning automation to make a dataset understandable.

Honors and Awards

- Queen's University International General Bursary Award in 2022, 2023.
- Awarded MITACS Business Strategy Internship (BSI), 2023.
- Queen's Graduate Award in 2022, 2023, 2024.
- Board scholarship in RUET for from 2016 to 2021
- Higher Secondary Certificate (HSC) Examination 2015:
 - Awarded Rajshahi board Scholarship for excellence in Higher Secondary Certificate (HSC) examination in TalentPool Grade Full Tuition Fee waiver in Bachelor with around 550 USD stipend for the period of 2016 to 2020.
 - Secured the position of 13th in Rajshahi Board in Higher Secondary Certificate (HSC) examination, 2015.
- Junior School Certificate (JSC) Examination 2011:
 - Awarded Rajshahi board Scholarship for excellence in Junior School Certificate (JSC) examination in General Grade—Full Tuition Fee waiver in Bachelor with around 71 USD stipend for the period of 2012 to 2013.

Reviewing/Community Services

Journal Reviewer

- Neurocomputing Journal: 2024-Present

Conference Program Committee/Reviewer

- Junior PC Member at the Mining Software Repositories Conference (MSR) 2024
- Software Analysis, Evolution and Reengineering (SANER) 2025, Research Track
- Program Committee member at HCSE&CSE 2024
- Sub reviewer: FSE 2023, ASE 2023

Talks/Presentation

- "Understanding the Time to First Response In GitHub Pull Requests", Wallenberg AI, Autonomous Systems and Software Program (WASP) at Queen's University, Canada.

Teaching Assistant

- Head TA for CISC 320: Fundamentals of Software Development - Fall 2024.
- Head TA for CISC 235: Data Structure - Winter 2024.
- TA for CISC 320: Fundamentals of Software Development - Fall 2023.
- TA for CISC 372/CISC/CMPE 351: Advanced Data Analytics - Winter 2023.

Research and Technical Skills

- Programming: Python, C, C++, SQL
- Statistical Data Analysis: Empirical Analysis of Software Engineering, Regression Modeling, Predictive Modeling, Qualitative Analysis
- NLP and ML: Classification, Deep Neural Models, Transformers, BERT, Large Language Models, Token Level Text Classification.

Machine Learning Competition Ranks

- **First Runner-Up (Top 0.5%)** in Robi Datathon 2.0.
- **28th out of 2,132 participants (Top 1.3%)** in "Of Genomes And Genetics: HackerEarth Machine Learning Challenge."
- **20th out of 2,796 participants (Top 0.7%)** in "Fast, Furious and Insured: HackerEarth Machine Learning Challenge."
- **35th out of 2,124 participants (Top 1.6%)** in "A Fine Windy Day: HackerEarth Machine Learning Challenge."
- **125th out of 3,958 participants (Top 3.1%)** in "HackerEarth Machine Learning Challenge: Exhibit A(rt)."
- **145th out of 5,000+ teams (Top 2%)** in "HackerEarth Machine Learning Challenge: Adopt a Buddy."
- **88th out of 3,314 teams (Top 3%)** and earned a **Solo Silver Medal** in "SIIM-ISIC Melanoma Classification" on Kaggle.
- **91st out of 541 teams (Top 17%)** and earned a **Solo Bronze Medal** in "Google Landmark Retrieval 2020" on Kaggle.
- **32nd out of 487 participants (Top 6%)** in "HackerEarth's Machine Learning Challenge: Slashing Prices for the Biggest Sale Day."
- **86th out of 5,800+ participants (Top 1.4%)** in "HackerEarth Deep Learning Challenge: Identify the Dance Form."

References

Available upon request