H M QUAMRAN HASAN

Alberta, Canada | +18259631602 | quamranhasan@gmail.com | LinkedIn | GitHub

EDUCATION

University of Alberta   Sep 2024 - Present
Masters of Science in Computer Science

Korea Advanced Institute of Science and Technology (KAIST)   Sep 2019 - Feb 2024
Bachelor of Science in Computer Science & Business Technology Management
CGPA**:** 3.74/4.30, (94.4/100), Honors**:** Cum Laude

SKILLS

- **Languages:** Python (5 years), SQL (2 years), C (2 years), JAVA (1 year)
- **Development and Tools:** Django ORM, Amazon Web Services, TensorFlow, PyTorch, Keras, openCV, Hotjar, Figma, IBM SPSS Statistics, SAP Analytics Cloud, Redash, Selenium,
- **Data and Visualization:** Google Analytics, Google Tag Manager, Google BigQuery, Tableau, MySQL, PostgreSQL, Pandas, NumPy, Scikit Learn, Seaborn, A/B Testing, Data Mining, Data Management

INDUSTRY EXPERIENCE

MolpaxBio | Daejeon, S. Korea | *AI Researcher*   Feb 2024 - June 2024
- Developed a novel metric and a model with a precision of 0.83 for cell structure detection for qualitative and quantitative evaluation of NASH.
- Achieved an FID score of 12.97 and precision of 0.77 after developing a GAN model to generate lung tissue WSI patches.

SicPama | Seoul, S. Korea | *Data Scientist*   Nov 2022 - Feb 2023
- Led UX/UI team to optimize service UI based on user behavior analysis using Hotjar and Google Analytics.
- Designed and implemented a streamlined data collection strategy using Google Tag Manager.
- Achieved a 90% reduction in data collection time by automating POS data collection.
- Improved sales by developing a recommendation system from the ground up.

Kooky | Seoul, S. Korea | *Data Analyst*   Jan 2022 - Aug 2022
- Achieved a 150% increase in users by identifying potential markets and improving market-wise user experience
- Achieved an 80% increase in user engagement, by leading the content team based on user behavior analysis
- Led data collection, storage, and extraction for insights
- Guided data-driven go-to-market and artist selection through user location and behavior analysis

RESEARCH EXPERIENCE

KAIST Data Mining Lab | Daejeon, S. Korea | *Research Intern*   Jul 2023 - Dec 2023
- Contributed to the DB4DL project, focusing on enhancing distributed training efficiency for Transformers. Conducted research on models such as BERT and T5 to identify optimal parallelism strategies.

KAIST Users and Information Lab | Daejeon, S. Korea | *Undergraduate Student Research*er   Mar 2023 - Dec 2023
- Enhanced ChatGPT's accuracy for reasoning tasks in Bengali by 20% through back translation and CoT reasoning.
- Established the BEnQA English-Bengali parallel corpus, comprising 5,161 science questions from the Bangladesh national curriculum grade school exams, including many that involve multi-step reasoning.
- Proposed a prompting strategy that consistently improves performance in Bengali.

PUBLICATIONS

Sheikh Shafayat, **H M Quamran Hasan**, Minhajur Rahman Chowdhury Mahim (2023, December 16). BEnQA: A Question Answering and Reasoning Benchmark for Bengali and English. ACL Findings 2024, Bangkok. Thailand.

Sheikh Shafayat, **H M Quamran Hasan**, Minhajur Rahman Chowdhury Mahim (2023, November 20). Reasoning Beyond English - A Benchmark for Bengali [Poster Presentation]. JKAIA 2023, Seongnam-Si, Gyeonggi-do, South Korea.

LEADERSHIP AWARDS & EXTRACURRICULARS

- **UofA** | *Teaching Assistant***:**   Sep 2024 - Present
  Serving as a TA for the database course assisting with grading, lectures, and conducting lab sessions.
- **Computer Science Graduate Students Association** | *Director at Large*   Sep 2024 - Present
- **KAIST** | *Teaching Assistant***:**   Jul 2023 – Dec 2023
  Served as a TA for English as a Foreign Language courses at KAIST obtaining 100% satisfaction level from professors.
- **KAIST International Students Association** | *Deputy Secretary & Director of Welfare Division*   Aug 2021 – Jan 2023
- **KAIST Leadership Award**
- **KAIplus Scholarship Recipient**