Md Omar Faruge RIYAD

Software Engineer



EDUCATION

2018-2023

B.Sc. in Computer Science and Engineering

Shahjalal University of Science and Technology (SUST)

CGPA: 3.53/4.00 (Last two years: 3.83)



★ STANDARDIZED TEST SCORES

> GRE: 317/340 (Quantitative: 160, Verbal: 157, Analytical Writing: 3) > TOEFL: 104/120 (Reading: 29, Listening: 27, Speaking: 23, Writing: 25)



RESEARCH EXPERIENCE

Participation in Shared Tasks

2024

BRAINTEASER: A Novel Task Defying Common Sense - SemEval 2024

- > Designed data augmentation pipelines to improve the robustness of the model for common sense reasoning tasks.
- > Conducted a comparative analysis on advanced language models.

2023

| Violence Inciting Text Detection (VITD) – BLP Workshop at EMNLP 2023

- > Applied semi-supervised self-training techniques to address the small size of the data set and class imbalance, utilizing external data sets to improve model robustness.
- > Enhanced dataset diversity and quality through back-translation using the Googletrans API, improving semantic variety, and correcting linguistic inconsistencies.
- > Implemented an ensemble approach with bagging and majority voting to reduce variance and increase model stability.

Undergraduate Thesis

2022

Improving Answer Space Diversity in Visual Question Answering (VQA) through Automatic Question and Answer Generation

- > Conducted a comparative study of various VQA methods, analyzing their limitations
- > Addressed Answer Space Diversity limitation in VQA v2 dataset by augmenting training data using auto-generated question-answer pairs.



Publications

Deja Vu at SemEval 2024 Task 9: A Comparative Study of Advanced Language Models for Commonsense Reasoning Accepted in The SemEval 2024, NAACL, Mexico

Team_Syrax at BLP-2023 Task 1: Data Augmentation and Ensemble Based Approach for Violence Inciting Text Detection in Bangla

Accepted and Presented at The BLP 2023, EMNLP, Singapore



PROFESSIONAL EXPERIENCE

Present April 2023

Software Engineer, DYNAMIC SOLUTION INNOVATORS, Bangladesh

- > Spearheaded security-sensitive web applications for the Bangladesh Government and USAID, including E-Appeal and HMS.
- > Led the **Training** and **User Acceptance Testing** (UAT) of E-Appeal.
- > Integrated Java Messaging Service (JMS) for decoupled and asynchronous communication between
- > Implemented notification system (In-app and email) using AOP and JMS to manage cross-cutting concerns.
- > Managed containerized deployments of the GlassFish server, streamlining resource allocation and server stability.
- > Enhanced monitoring by integrating Logback, Loki, and Grafana for centralized logging.

Java | JEE | JSF | Primefaces | CDI | EJB | JPA | PostgreSQL | JasperReports | JMS | OpenMQ | Glassfish



Present

Course Instructor, DYNAMIC LEARNING,

2024

- > Designed the complete course curriculum for JSF with Java Enterprise Edition
- > Provided mentorship and hands-on coding sessions

PROJECTS AND OPEN SOURCE CONTRIBUTION

PRIMEFACES (JPALAZYDATAMODEL FEATURE ENHANCEMENT)

2024

github.com/primefaces/primefaces/pull/12865

Contributed to the PrimeFaces open-source project by adding the ability to inject custom FilterMeta into the JPALazyData-Model component. This enhancement allows developers to perform advanced, customizable filtering within DataTables.

Java JSF Primefaces JPA

Shopaholic 2022

github.com/Nowshadjunaed/Shopaholic

Built a full-stack e-commerce platform connecting customers, banks, and suppliers.

JavaScript Node.js Express.js MongoDB React Redux

Brevity 2021

github.com/riyadomf/Brevity

Developed a responsive blog platform designed to connect beginners with experts in various fields. The platform enables experienced individuals to share knowledge, resources, and help others with learning difficulties.

Python | Flask | MySQL | JavaScript | HTML | CSS |

DISASTER-ALERT 2022

github.com/riyadomf/Disaster-Alert

Developed a hackathon project focused on providing daily weather updates and a subscription-based notification system for natural disasters.

JavaScript Node.js Express.js MongoDB React

SKILLS

Programming Languages Java, C/C++, Python, JavaScript, SQL, Shell

Frameworks & Libraries JEE, JSF, CDI, EJB, Primefaces, JPA, Express.js, Flask, React

Database PostgreSQL, MySQL, Neo4j Graph Database

Tools, OS & Interests Git, Github, Glassfish, Docker, JasperReports, Basic Cryptography, ŁTEX

Problem Solving

Solved over 500+ problems with C/C++ in different online judges

> Vjudge: ☑ riyad2017331042 | LeetCode: ☑ riyad42 | LightOJ: ☑ riyadomf

> StopStalk Profile: riyadomf

EXTRA-CURRICULARS AND ACHIEVEMENTS

- > Ranked 19th (improved to 12th after post-competition experiments) in Violence Inciting Text Detection (VITD), BLP 2023.
- > Volunteer, IEEE International Conference on Bangla Speech and Language Processing (ICBSLP), 2019.
- > Ranked 11th in BUET CSE Fest 2022 AI Contest and 19th in Battle of Brains by Green University
- > Runners-Up, Intra-Department Football Tournament, 2022.