Md Nadim Mahmud

347-793-6236 | mahmudm2@miamioh.edu | github.com/Nadim-Mahmud | linkedin.com/in/nadim121

Education

M.S. in Computer Science   Aug 2024 – Present
Miami University, *Oxford, OH*   Anticipated Graduation: May 2026
GPA: 4.0
Research Interests: LLM, AI, Machine Learning, Wheelchair Accessibility

BSc. Engg. in Computer Science & Engineering   Jan 2017 – May 2022
University of Rajshahi, *Rajshahi, Bangladesh*
GPA: 3.92

Employment

Therap Bd Ltd., *Dhaka, Bangladesh*   Oct 2022 – July 2024
Software Engineer
Tech Stack: Java Spring Framework, Hibernate, Oracle SQL, JSP, JavaScript, jQuery
- Played a key role in developing a scalable push notification framework, used by 300,000+ users
- Developed Excel upload/download solutions using internal frameworks, improving data entry efficiency by 80%
- Implemented advanced archive and search functionality with internal frameworks
- Developed database migration scripts
- Conducted thorough code reviews, ensuring quality and best practices

Samsung R & D Institute Bangladesh, *Dhaka, Bangladesh*   June 2022 – Oct 2022
Engineer II
- Contributed to the development of the Samsung Smart Ring communication protocol module
- Developed an Android app to test the RTOS communication module

Projects

Activity Detection Using Sensor Data (ML) | Project Link   Oct 2024 – Dec 2024
- Trained ML models for activity recognition, achieving 67% accuracy
- Applied feature engineering with PCA and TSFresh
- Optimized models using GridSearchCV and RandomizedSearchCV

Urban Sprawl Detection (GIS) | Project Link   Nov 2024 – Dec 2024
- Analyzed urban sprawl in Dhaka using remote sensing and GIS with USGS data
- Computed and visualized NDBI, SAVI, MNDWI, and IBI indices for land use assessment

RU Contacts App (10000+ downloads) | PlayStore Link   April 2022 – June 2022
- Developed a contacts app for Rajshahi University using Android Studio and Kotlin
- Implemented MVVM architecture for better maintainability and scalability

Leadership and University Engagements

Graduate Teaching Assistant, Miami University, *Oxford, OH*   Aug 2024 – Present
- Mentoring students in their Software Engineering projects, helping with design and implementation

Programming Club Trainer, University of Rajshahi*, Rajshahi, Bangladesh*   Jan 2018 – May 2022
- Conducted 100+ Algorithm and Data Structure sessions
- Organized 20+ programming contests

Achievements and Programming Contests

- Faculty of Engineering Dean's List, University of Rajshahi   Academic Years: 2017, 2018, 2019, 2020
- Ranked **6th in ITEE** FE Exam taken by IPA of Japan   Nov 2022
- Passed professional test at Samsung R & D Bangladesh   Sept 2022
- Ranked 25th, Nadim_Mahmud, Samsung R&D Bangladesh Coding Contest   2019
- Ranked 74th, RU_Squadron, ICPC Dhaka regional contest   2019

Language and Technologies

- **Programming Languages:** C, C++, Java, Python, JavaScript, Matlab
- **Tech-Stack:** Java Spring, Hibernate, JSP, MySQL, Oracle SQL
- **Version Control:** Git, GitHub, Bit-bucket