

Kazi Farhana Faruque



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<https://github.com/Farhana-Faruque>

Technical Skills

- **Languages** : C, C++, Java, Python
- **Web Development** : HTML, CSS, JavaScript
- **Framework** : React.js, FastAPI
- **Database** : Oracle, MySQL, PostgreSQL, MongoDB
- **Tools** : Git, Github, VS Code, Canva, Kaggle, Google Colab

Projects

MotionMatrix | React, PostgreSQL, FastAPI | <https://github.com/Farhana-Faruque/MotionMatrix>

Developing a web application with hand detection for garment factories to track productivity, efficiency, and generate performance reports.

gomokuPro | React.js, Node.js, Express.js, MongoDB | <https://github.com/tjadnan1520/gomokuPRO>

Developed a web-based Gomoku game with an AI opponent and persistent game records, using Minimax and alpha-beta pruning with a custom evaluation function for smarter moves.

DesktopApp | Java, JavaFX | <https://github.com/Farhana-Faruque/DesktopApp>

Developed a desktop application for super shop management, enabling product, order, stock, and customer data management using design patterns such as Singleton, Observer, Command, Strategy, Bridge, and Memento.

Small Language Model | Pytorch, Jupyter Notebook | <https://github.com/Farhana-Faruque/Small-Language-Model>

Built a compact, efficient Transformer-based model for creative text generation, trained on TinyStories.

Image Compression Tool | C | <https://github.com/Farhana-Faruque/SPL-1>

Developed an image compression tool supporting lossless compression for PGM and BMP images and lossy compression for JPEG images.

Education

Bachelor of Science in Software Engineering

Institute of Information Technology
University of Dhaka (2023-Present)

Expected Graduation: Sep 2027

CGPA: 3.21 (upto 3rd semester)

Higher Secondary Certificate

Dhaka City College (2022)

GPA: 5.00

Secondary School Certificate

Bottomley Home Girls' High School (2020)

GPA: 5.00

Work Experience

• **Content Executive** | Noor Physics Academy

September 2023 - May 2024.

Worked in the Physics Department at an ed-tech company under the supervision of team lead

Participation and Achievements

- **3rd position**, IIT Girls Programming Contest organised by IITGC (IIT Girls Community)
- **2nd position**, Oil Painting arranged by CAA (Creative Art Academy)
- Anchored & Volunteered at Cefalo presents ITVerse 2023
- Participated in 8th Bangladesh Women's Mathematics Olympiad 2024
- Participated in 1st S.N.Bose National Science Festival 2025 (Poster Presentation)
- Participated the workshop on Building a Small Language Model from Scratch (BARTA LAB)

References

Professor Dr B M Mainul Hossain

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