

Emam Hasan

Purabi Mor, 100 Feet Road, Notun Bazar, Dhaka, Bangladesh. → +8801863703256

ehasan201302@bscse.uiu.ac.bd

https://foyez-hub.github.io/F_O_Y_E_Z

https://github.com/foyez-hub

https://www.linkedin.com/in/emam-hasan302

EDUCATION

• United International University

2020-2024

Bachelor of Science in Computer Science and Engineering

United City, Madani Avenue, Dhaka 1212

- CGPA: **3.63** (124/137 credits)
- Merit-based scholarship: 50% 3 times, 25% 4 times.
- Thesis topic: Chittagonian dialect to Standard Bangla voice conversion.
- Relevant Coursework: Data Structures and Algorithms Artificial Intelligence Web Programming Basic Graph Theory Machine Learning Bioinformatics Psychology Accounting.

PROGRAMMING CONTESTS

Achievements

- UIU Coders' Combat 3.0: Secured 4th place out of 200 participants | Ranklist
- 2023 ICPC Asia Dhaka Preliminary Contest: Secured 250th place out of 2600 teams | Certificate
- 2022 ICPC Asia Dhaka Preliminary Contest: Honorable Mention | Certificate
- 2021 ICPC Asia Dhaka Preliminary Contest: Honorable Mention | Certificate
- 2020 ICPC Asia Dhaka Preliminary Contest: Honorable Mention | Certificate
- SRBD Contest(2023): Qualified for Round 2 and achieved a rank of 306 out of 1500+ participants | Ranklist
- Codeforces Round 827 (Div. 4): Secured 2392th place out of 34321 participants
- CodeChef Starters 18 Division 3: Secured 119th place out of 7325 participants

Online Judges | Stopstalk Profile

- Codechef: ehasan302 | Highest Rating: 1578 | Solved 112+ problems | Participated in 27+ contests
- $-\ \mathrm{Codeforces}: \ F_O_Y_E_Z \ \mid \mathrm{Max}\ \mathrm{Rating}: \ \mathbf{Pupil}, \ \mathbf{1229} \mid \mathrm{Solved}\ \ \mathbf{1066} + \ \mathbf{problems} \mid \mathrm{Participated}\ \mathrm{in}\ \mathbf{188} + \ \mathbf{contests}$
- AtCoder: emam_hasan | Max Rating: 278-Kyu | Solved 173+ problems | Participated in 36+ contests

TECHNICAL SKILLS & INTERESTS

Languages: C, C++, PHP, Javascript, Java, HTML, CSS, SQL.

 $\textbf{Frameworks/Developer Tools:} \ \, \text{Laravel, Bootstrap, Git and GitHub, LaTeX}.$

Databases: Mysql,Firebase.

Soft Skills: Problem-solving, Leadership.

Project Management Tool: Jira

Areas of Interest: Machine Learning, Bioinformatics, Natural Language Processing.

PROJECTS

• Cinephiles | 😯

April 2023

Web app for movie enthusiasts with exploration, lists, watch parties, and a vibrant community.

- Tools & technologies used: Laravel, PHP, JavaScript, Ajax, MySQL, HTML, CSS
- Led a dynamic team of **5 developers** in successfully delivering the entire project, encompassing features like movie exploration, personal lists, watch parties, friendship features, and the innovative meme contest.
- Implemented movie-themed **meme contest** feature with voting, boosting user engagement.
- Developed **user-friendly privacy** controls with customizable settings for personal lists, ensuring both enhanced user experience and robust data security.

• Library Automation System | 🔾

November 2022

IoT library system: RFID lockers, cloud-stored data, web display, Ultrasonic & Sound Sensors.

- Tools & technologies used: JavaScript, Ajax, Arduino Uno, Node Mcu, Firebase, HTML, CSS
- Engineered a cloud-based library management system leveraging Firebase for seamless data storage.
- Integrated **Sound Sensors** for enhanced functionality, enabling **real-time monitoring** of environmental noise.
- Designed and implemented a dynamic **website to display live data**, providing a user-friendly interface for efficient library management.

• Codewar | 🖸

A web platform enabling users to participate in **coding contests**, practice problems, and track their progress.

- Tools & Technologies Used: JavaScript, PHP, Mysql, Bootstrap, HTML, CSS
- Developed a responsive and intuitive user interface for **seamless contest participation** and problem-solving.
- Implemented server-side logic using PHP for user authentication, contest submissions, and problem solve tracking.
- Integrated a comprehensive **problem repository** for users to read, practice, and monitor their solved problems.
- Designed and implemented a user profile system showcasing a detailed list of problems solved.

• Course Management System | 🖸

A website for students to select courses, personalized recommendations, and friend-based course matching.

- Tools & technologies used: PHP, Mysql, JavaScript, HTML, CSS
- Implemented a **schedule algorithm** optimizing academic planning for students.
- Developed a collaborative feature for **matching courses with friends**, fostering shared learning experiences.

• Canteen Management System | 😱

March 2021

This System enables users to browse, select, and purchase food items from three different canteens

- Tools & technologies used: Java, JavaFX
- Developed functionality to allow users to browse, select, and **purchase food items** from three distinct canteens within the system.
- Created a **dynamic menu display** showcasing food items and their corresponding prices, providing users with a clear overview of available options.

ACHIEVEMENTS

- UIU intra University AI Contest Fall 2022 | Certificate **1st place** out of **100**+ participants.
 - Applied SVM to a train.csv file with Medical Paper Abstracts for multiclass classification of medical condition labels, incorporating text preprocessing to optimize predictive accuracy.
- Microprocessors and Micro-controllers Lab Category of CSE project Show,Fall 2022 | Certificate **2nd Runner-up** out of **160**+ participants.
 - Created an IoT library system with **RFID lockers**, cloud storage, web display, and added features using Ultrasonic and Sound Sensors.
- System Analysis and Design Lab Category of CSE project Show, Fall 2022 | Certificate **3nd Runner-up** out of **200**+ participants.
 - Created a **movie enthusiast web app** with exploration, lists, watch parties, and a lively community.
- Received 2500 USD research grant from Institute of Advanced Research, Oct 2023 | IAR

Toward Lightweight Diabetic Retinopathy Classification: A Knowledge Distillation Approach for Resource-Constrained Settings

- A knowledge distillation-based fusion model with a lightweight 102MB student model. Achieved exceptional accuracy with 100% in binary and 99.04% in multi-class classification on the APTOS dataset, and 98.05% for binary, and 94.17% for multi-class accuracy on the IDRiD dataset. This approach holds promise for practical DR assessment in resource-constrained environments.

RESEARCH

Journals

• Toward Lightweight Diabetic Retinopathy Classification: A Knowledge Distillation Approach for Resource-Constrained Settings | Ø paper | MDPI · Nov 16, 2023

Conferences

- EWasteNet: A Two-Stream Data Efficient Image Transformer Approach for E-Waste Classification **IEEE** 8th International Conference on Software Engineering and Computer System | 9 paper | Sep 26, 2023
- Data Segmentation with Improved K-Means Clustering Algorithm|First Author| On review | 26th International Conference on Computer and Information Technology (ICCIT)

REFERENCES

Dr. Md. Motaharul Islam, Ph.D.

Professor & Director - MSCSE, Dept. of CSE,

United International University. Email: motaharul@cse.uiu.ac.bd Prof. Dr. Dewan Md. Farid,ph.D.

Professor Dept. of CSE,

United International University. Email: dewanfarid@cse.uiu.ac.bd