

Abanti Chakraborty Shruti

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Professional Experience

Senior Software Quality Assurance Engineer

Enosis Solutions
October 2021 - Present

Adjunct Faculty

Ahsanullah University of Science and Technology
September 2021 - November 2021

Education








Masters of Science (MSc.) in Computer Science and Engineering

Brac University
2022-2024 CGPA: 4.00 out of 4.00



Bachelor of Science (BSc.) in Computer Science and Engineering

Ahsanullah University of Science and Technology
2016-2021 CGPA: 3.84 out of 4.00

Technical Skills

-  **Programming Languages:** C, C++, Java, Python, C#, MySQL, PHP, SQLite, PL/SQL, JavaScript, Objective C
-  **Operating System:** Windows, Ubuntu, MacOS
-  **Designing Tools:** HTML, CSS
-  **Frameworks:** Bootstrap, Dot Net
-  **Issue tracking tool:** Jira
-  **Workspace Collaboration Tool:** Confluence
-  **Automation Tools:** Cypress, Postman, Selenium,

Robot(Basic)

-  **IDE:** Google Colab, Jupyter Notebook, CodeBlocks, NetBeans, PyCharm, Android Studio, VSCode, MS Visual Studio, Arduino, MATLAB, XCode, Proteus, MS SQL Server, Sublime Text, emu8086
-  **Others:** Machine Learning, Deep Learning, GitHub, Latex, Microsoft Office, Adobe Photoshop, Google office tools

Language Proficiency

- Language:** Fluent in Bangla, English, and Hindi.
- IELTS Score:** Overall 8.0 (L:9, R:8.5, W:6.5, S:7)

Research/Thesis

-  A. C. Shruti, R. H. Rifat, M. Kamal and M. G. R. Alam, "A Comparative Study on Bengali Speech Sentiment Analysis Based on Audio Data," 2023 IEEE International Conference on Big Data and Smart Computing (BigComp), Jeju, Korea, Republic of, 2023, pp. 219-226, doi:10.1109/BigComp57234.2023.00043 .
-  Kamal, M., Rifat, R. H., Shruti, A. C., Alam, M. G. R. (2023, April). **Multi-criteria Decision Theoretic Approach for Tour Package Selection using Fuzzy AHP and TOPSIS Methods: A Case Study on Cox's Bazar.** In 2023 IEEE 8th International Conference for Convergence in Technology (I2CT) (pp. 1-7). IEEE. doi:10.1109/I2CT57861.2023.10126334
-  Rifat, R. H., Shruti, A., Kamal, M., Sadeque, F. (2023, July). **ACSMKRHR at SemEval-2023 Task 10: Explainable Online Sexism Detection (EDOS).** In Proceedings of the 17th International Workshop on Semantic Evaluation (SemEval-2023) (pp. 724-732). link: ACSMKRHR at SemEval-2023 Task 10: Explainable Online Sexism Detection(EDOS)
-  **Federated Learning for Potato Leaf Disease Detection using CNN**
Marufa Kamal, Rakib Hossain Rifat, Abanti Chakraborty Shruti, and Annajiat Alim Rasel. *The International Conference on Digital Image Computing: Techniques and Applications (DICTA) 2023, accepted for publication.*
-  **Comparison of Machine Learning Models for Early Prediction of Diabetes with LIME Interpretability**
Abanti Chakraborty Shruti, Marufa Kamal, Rakib Hossain Rifat, Ehsanur Rahman Rhythim, Md Humaion Kabir Mehedi and Annajiat Alim Rasel. *2023 IEEE 11th Region 10 Humanitarian Technology Conference (R10-HTC), and Systems, accepted for publication.*

Knee Osteoarthritis Disease Detection using Federated Learning and Explainable AI

Rakib Hossain Rifat, **Abanti Chakraborty Shruti**, Marufa Kamal, M. G. R. Alam. *26th International Conference on Computer and Information Technology (ICCIT), accepted for publication.*

Memory-based Collaborative Filtering by Finding the Experts

Undergraduation thesis. We have tried to identify and modify the basic collaborative filtering(CF) algorithm problems by integrating our designed expert-identifying algorithm. We have also reduced the dimensionality of the basic CF algorithm in our proposed solution.

Into the Heart of Bangla Speech: Advancing Speech Sentiment Recognition with Semi-Supervised Multimodal Machine Learning Model Leveraging Iterative SHAP-based Feature Selection

Masters thesis. Introduced a multimodal Bangla speech sentiment recognition method considering three modalities- Audio, Text, and Image using Early and Late fusion techniques. Proposed a semi-supervised learning based ML model to recognize Bengali speech sentiment.

Undergraduate Projects

Harassment Detection from Social Media Bangla Comments using Deep Learning

A system to identify harassment from the social media Bangla comments

Language: Python Tools: Google Colab

Security Company Management

A distributed database system project

Language: PL/SQL Tools: SQL++

Doc and Dine

A compact website for food business

Language: C# Framework: ASP.net Tools: Microsoft Visual Studio

Home Cleaning Robot

A hardware project

Language: Arduino Tools: Arduino IDE

MovieIT

A Movie reviewing website

Language: PHP, HTML, CSS, JavaScript Framework: Bootstrap Tools: Sublime Text

Police Station Case Management System

A database project for digital police stations

Language: Java , MSSQL Tools: Netbeans

Angonaa

Android Application for women safety

Language: Java, XML Tools : Android Studio

Modern Tutions

Desktop application for finding tuition

Language: Java Tools : Netbeans

Certifications and Participations

- Training for Mobile Application Developer (iOS) from Digicon Technologies.
- Deep learning course from Deeplearning.ai from Coursera.
- Python for Everyone course from the University of Michigan from Coursera.
- Introduction to Data Science in Python from DataCamp
- Introduction to Importing Data in Python from DataCamp
- Cleaning Data in Python from DataCamp
- Machine Learning with Tree-Based Models in Python from DataCamp
- Cluster Analysis in Python from DataCamp
- Participated in several Software showcasing competitions.

Achievements

- 🏆 Awarded **"Dean's List of Honor"** for securing a CGPA of more than 3.75 (based on B.Sc. result).
- 🏆 Awarded **100% tuition fee waiver** for Postgraduate (M.Sc.) result.
- 🏆 Awarded **50% tuition fee waiver** for Spring'20, Fall'19 and Spring'19 semester for Undergraduate (B.Sc.) result.
- 🏆 Awarded as **"Special Mention All Girls Team"** in Project Display in Mujib Borsho IT Carnival'20 of Dhaka International University in 2020.
- 🏆 Awarded as **"Runners up"** in Project Display in Codeware'18 (Intra AUST Project Showcase Spring 18) in the year 2018.

Reference

Mr. Mir Tafseer Nayeem

Ph.D. Student

University of Alberta

Edmonton, AB, Canada.

AND

Assistant Professor (On Leave)

Ahsanullah University of Science and Technology

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Dr. Md Golam Robiul Alam

Professor

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