

# Abanti Chakraborty Shruti

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## Professional Experience

### 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 (Thesis Ongoing)

Brac University 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


### Higher Secondary Certificate (HSC)

Viqarunnisa Noon College  
2016 GPA: 5.00 out of 5.00

### Secondary School Certificate (SSC)

Viqarunnisa Noon School  
2014 GPA: 5.00 out of 5.00

## 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:** Postman, Cypress(Basic), Robot(Basic)


 **IDE:** Google Colab, Jupyter Notebook, CodeBlocks, NetBeans, PyCharm, Android Studio, MS Visual Studio, Arduino, MATLAB, XCode, Proteus, MS SQL Server, Sublime Text, emu8086

 **Others:** Machine Learning, Deep Learning, GitHub, Latex, Microsoft Office, Adobe Photoshop

## 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**, Ehsanur Rahman Rhythim, Md Humaion Kabir Mehedi and Annajiat Alim Rasel. **4th International Conference on Communication, Circuits, and Systems, 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 (ICIT), under review.**

## **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. In We have also reduced the dimensionality of the basic CF algorithm in our proposed solution.

## **Undergraduate Projects**

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### **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**

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- 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**

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- 🏆 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**

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### **Mr. Mir Tafseer Nayeem**

Ph.D. Student  
University of Alberta  
Edmonton, AB, Canada.  
AND  
Assistant Professor (On Leave)  
Ahsanullah University of Science and Technology  
**Email:** tafseer.nayeem@gmail.com

### **Mr. Nazmus Sakib**

Assistant Professor  
Department of Computer Science and Engineering  
Focal Point - aspire to innovation (a2i)-AUST  
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