Md Shaikh Abrar Kabir

Lecturer · Ahsanullah University of Science & Technology

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Research Interests

My research interest focuses around the domain of Wireless communication technologies such as 5G, LTE, MIMO-SFBC-OFDM etc. I would love to work on Wireless Communication and discover various features of Network Management System, Network Access Control. I would also love to apply Machine Learning and Deep Learning techniques to solve problems on IoT, Social Sensing etc.

Educational Background

B.Sc. in Electrical & Electronic Engineering (EEE)

▲ AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (AUST) Dhaka 1208, Bangladesh APRIL 2014-MARCH 2018

△ CGPA: 3.945 out of 4.000

≈ Class Position: 1st out of 142 students

► Batch Position: 1st out of 743 students from all departments

Publications & Research Experience (https://msakabir.github.io/formal/research.html)

- 1 Md. Jakaria Rahimi, Md. Shaikh Abrar Kabir, Azhar Niaz, Md. Jahidul Islam, Oli Lowna Baroi, " BER Performance Optimization of the SFBC-OFDM System for Economical Receiver Design with Imperfect Channel Estimation", International Journal of Wireless and Microwave Technologies (IJWMT), Vol.9, No.6, pp. 19-30, 2019.DOI: 10.5815/ijwmt.2019.06.03
 - Link: http://www.mecs-press.org/ijwmt/ijwmt-v9-n6/v9n6-3.html
- 2 Oli Lowna Baroi, Md. Shaikh Abrar Kabir, Azhar Niaz, Md. Jahidul Islam, Md. Jakaria Rahimi, " Effects of Filter Numbers and Sampling Frequencies on the Performance of MFCC and PLP based Bangla Isolated Word Recognition System", International Journal of Image, Graphics and Signal Processing(IJIGSP), Vol.11, No.11, pp. 36-42, 2019.DOI: 10.5815/ijigsp.2019.11.05
 - Link: http://www.mecs-press.org/ijigsp/ijigsp-v11-n11/v11n11-5.html
- 3 O. L. Baroi, M. S. A. Kabir, A. Niaz, A. M. Rakib, M. J. Islam and M. J. Rahimi, "Effects of Different coefficients on MFCC and PLP for Bangla Speech Corpus using Tied-state Triphone Model," 2019 International Conference on Electrical, Computer and Communication Engineering (ECCE), Cox's Bazar, Bangladesh, 2019, pp. 1-6. doi: 10.1109/ECACE.2019.8679395
 - ♦ Link: https://ieeexplore.ieee.org/document/8679395
- 4 O. L. Baroi, A. Niaz, M. J. Islam, M. S. A. Kabir, E. Islam and M. J. Rahimi, "Effects of Different Environmental noises and Sampling Frequencies on the performance of MFCC and PLP based Bangla Isolated Word Recognition System," 2019 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT), Dhaka, Bangladesh, 2019, pp. 1-6. doi: 10.1109/ICASERT.2019.8934462
 - Link: https://ieeexplore.ieee.org/document/8934462
- [5] MSA Kabir, A Niaz, MJ Islam, SH Mahmud, R Zaman, MJ Rahimi, "Comparing the BER Performance of SFBC-OFDM System with STBC-OFDM System in FADING MIMO Channel" (Undergraduate Thesis)
 - Link: https://shaikh-abrar-kabir.github.io/thesis/

Professional Experience

Ahsanullah University of Science and Technology (aust) Lecturer, Department of EEE

Dhaka, Bangladesh January 2019-Present

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Selected Projects (Full List: https://msakabir.github.io/formal/projects.html)

♦ Software

• MATLAB GUI

Sentence Detector for Monophone/Triphone Model, Age Counter with Bangla & English Calendar, BER Analyzer w.r.t. SNR & SINR, Audio Recorder, Audio Mixer with Frequency Converter etc.

• MATLAB

- ♦ GAMES: Chess, Snakes and Ladders, and 4 in a Row
- ♦ MULTIMEDIA: 8D Audio Converter, Video/Gif/Jpg/Png to Video/Pdf/Gif Converter etc.
- ♦ **OTHERS:** Grade Counter for AUST
- Python: Excel Editor using Voice Recognition, 8D Audio Converter (desktop and web) etc.
- CADENCE: 4 bit Full Adder, Ring Counter, Johnson Counter, Write and Read Memory etc.
- Web Development using JS, HTML, CSS
- Age Counter with Calendar using JS (Run: https://shaikh-abrar-kabir.github.io/jscalendarrun/), C++, C#, GO, Java, PHP, Python, R etc.
- CGPA Calculator using Android Studio, Jframe, and Python GUI
- BER Analyzer using Android Studio (Flutter)
- AutoCAD

Design of Electrical & Electronic Circuits, Illustration of a 500 sq ft Flat and Electrical Low Load Connection Design, Designing and Capturing Video of 3D Room, Design of Side Views of Different Vehicles etc.

- Automatic Slot Switching using Proteus
- ♦ HARDWARE: Surge Protector, Digital Clock using Arduino

Awards & Achievements (Full List: https://msakabir.github.io/formal/achievements.html)

- **②** Champion in Inter University Programming Contest on MATLAB; AUST IEEE Student Branch, 2016
- **⊘** Runner up in MATLAB Storming; ENGENIUS, 2017
- "Perfectly Perfect" award for 100% Attendance from class 1 to class 10; 2011
- **②** Received Junior Scholarship of Government of Bangladesh in Talent pool; 2009
- **②** 2nd runner up at 1st Gregorian Mathematics Olympiad; 2005

Certified MOOC Courses

- "Machine Learning" offered by Stanford University and instructed by Dr. Andrew Ng on Coursera platform.
- "Convolutional Neural Networks" offered by deeplearning.ai and instructed by Dr. Andrew Ng on Coursera platform.
- "Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning" offered by deeplearning.ai and instructed by Laurence Moroney on Coursera platform.
- "Convolutional Neural Networks in TensorFlow" offered by deeplearning.ai and instructed by Laurence Moroney on Coursera platform.
- "HTML, CSS, and Javascript for Web Developers" offered by Johns Hopkins University and instructed by Yaakov Chaikin on Coursera platform.
- "Using Databases with Python" offered by University of Michigan and instructed by Charles Russell Severance on Coursera platform.
- "Using Python to Access Web Data" offered by University of Michigan and instructed by Charles Russell Severance on Coursera platform.

Software~Skills~(Full~List:~https://msakabir.github.io/formal/skills.html)

Arduino, AutoCAD, Pycharm, Cadence, Git, Krita, Xampp, PSpice, Proteus, Quartus, Visual Studio, PLC etc.

Framework Skills

Django, Tkinter, Swing, Flutter, Streamlit, Bootstrap, Tensorflow, JQuery

Programming Languages

Asm, C, C++, C#, Dart, Go, Java, JS, MATLAB, PHP, Python, R, SQL, Verilog, LaTex, HTML, XML, CSS