

# Ahsan Ul Islam

<https://ahsankafco.github.io/>  
ahsankafco@gmail.com | 936.668.0239

## SKILLS

### PROGRAMMING

Python(NumPy,Pandas,Scikit-learn  
Keras,Matplotlib,seaborn,PyTorch,  
Flask)  
SQL  
Java, HTML, C and C++  
MATLAB

### MACHINE LEARNING

Deep Learning  
Edge Detection  
ML Algorithms  
Time Series Forecasting  
Image Feature Extraction  
Image Classification  
Natural Language Processing  
Data Visualization

### SOFTWARE

Anaconda  
Jupyter Notebook,Google Colab  
Pycharm  
Git and Github  
MySQL and Oracle  
Eclipse  
Code::Blocks

## EDUCATION

### MS, COMPUTING AND DATA SCIENCE

SAM HOUSTON STATE UNIVERSITY  
Exp December 2023 | Huntsville, Tx  
Thesis: Gender and Ethnicity Bias in  
Deep Learning  
CGPA-3.87

### BS, ELECTRICAL AND ELECTRONICS ENGINEERING

AMERICAN INT. UNIVERSITY-BD  
Dec 2015 | Dhaka, Bangladesh  
Graduated with Honors  
CGPA-3.80

## LINKS

Github:// [ahsankafco](https://ahsankafco)  
LinkedIn:// [ahsankafco](https://ahsankafco)

## EXPERIENCE

### SHSU | GRADUATE ASSISTANT/RESEARCH ASSISTANT

May 2022 – present | Huntsville, Tx

- Assisting the instructor in the tasks of taking attendance, exam proctoring, collecting assignments, grading, and recording all data.
- Tutoring and mentoring for Database Systems, Database Security, Data Mining, Computer Networks, Programming Fundamentals and Software Engineering courses.
- Working As a researcher of U.S. Department of Homeland Security summer 2022 and 2023 projects- SWIR project and SNA project.

### 4K ENGINEERING(CONTRACTUAL) FOR ROBI AXIATA LTD RNO | PROJECT MANAGER

Jan 2018 – April 2022 | Dhaka, Bangladesh

- Extensive experience as a Radio Network Design and Optimization Engineer at Robi, specializing in 2G/3G/LTE networks.
- Proficiency in finalizing FAC procedures for 3G and LTE clusters, generating specialized CTO reports, and conducting RNP simulations for optimal coverage and capacity.

### 4K ENGINEERING(CONTRACTUAL) FOR ROBI AXIATA LTD RNP | PROJECT COORDINATOR

Jan 2016 – Dec 2017 | Dhaka, Bangladesh

- 2G/3G/4G Radio Network Design and Optimization Engineer at Robi Axiata LTD, with expertise in parameter mapping, network merger projects, and KPI optimization.
- Proficient in planning and maintaining network quality, conducting RF issue diagnosis, and strategic planning for marketing events.

## RESEARCH PROJECTS

### GENDER AND ETHNICITY BIAS IN DEEP LEARNING-SUBMITTED FOR PUBLICATION

- Investigated and mitigated gender and ethnicity bias in AI models through comprehensive analysis and innovative strategies.
- Conducted in-depth evaluations of model performance, including precision, recall, and F1-score metrics, to address bias concerns effectively.

### SOCIAL NETWORK ANALYSIS USING DEEP LEARNING-PUBLISHABLE

- Conducted advanced network analysis of the Enron email dataset, identifying key communication hubs and central actors.
- Employed state-of-the-art transformer-based language models (BERT, RoBERTa, XLNet) for sentiment analysis and optimized accuracy through ensemble technique.

### EXECUTION EXAMINATION OF DISTINCTIVE EDGE DETECTION ALGORITHMS-PUBLISHED

- Conducted research on edge detection techniques, specifically focusing on evaluating the performance of Canny and Prewitt methods on satellite images
- Employed IQA metrics (SSIM, MSE, PSNR, RMSE) to assess image quality, finding Canny edge detection superior to Prewitt for satellite images with Gaussian noise.