# Ahsan Ul Islam

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### SKILLS

#### **PROGRAMMING**

Python(NumPy,Pandas,Scikit-learn Keras,Matplotlib,seaborn,PyTorch, Flask) SQL,Azure,AWS and CI/CD pipelines 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

#### **TOOLS**

tableau, Power BI Jupyter Notebook,Google Colab Anaconda,Pycharm Git and Github MySQL,Oracle and MongoDB Eclipse

### **EDUCATION**

# MS, COMPUTING AND DATA SCIENCE

SAM HOUSTON STATE UNIVERSITY Exp December 2023 | Huntsville, Tx CGPA-3.87

# BS, ELECTRICAL AND ELECTRONICS ENGINEERING

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

## CERTIFICATION

IBM:// Data Science Professional Google:// Google Data Analytics

### LINKS

Github:// ahsankafco LinkedIn:// ahsankafco

### **EXPERIENCE**

#### **SAM HOUSTON STATE UNIVERSITY** | GA OR RA

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** JR. DATA SCIENTIST

Jan 2018 - April 2022 | Dhaka, Bangladesh

- Assist in developing NLP and analytics pipelines for specific projects, such as Lossinger Marazzi and goal detection in Football games
- Support data analysis and experimentation, including working on chatbots, data warehouse techniques, data cleaning, and recommendation systems.
- Contribute to the development of machine learning models, APIs, and data services, as well as assist in the maintenance of cloud services and task management.

#### 4K ENGINEERING | DATA ENGINEER

Jan 2016 - Dec 2017 | Dhaka, Bangladesh

- Implement DataOps methodologies for ETL processes, ensuring efficient data handling across various tools and architectures.
- Manage data lake and pipelines to support key applications and systems, aligning them with business needs.
- Drive data quality improvement, establish version control, and contribute to data pipeline development standards for enhanced database integrity.

### RESEARCH PROJECTS

# GENDER AND ETHNICITY BIAS IN DEEP LEARNING-ACCEPTED FOR IEEE CONFERENCE

- 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 -SUBMITTED FOR JOURNAL

- 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.