## Sehtab Hossain

Roeland Park, KS-66205 • +1-701-215-9093 • sehtabhossain@gmail.com • LinkedIn • GitHub • Tableau • Azure ML Studio

Diligent and aspirant Data scientist with 5+ years of experience in the field of Data Science, Medical Image Analysis, Telecom Data Analytics, simulation and Nanofabrication. Always thrive to hone my skills to grow professionally.

#### **Technical Skills**

• **Programming Languages:** Python, SQL, R, HTML, CSS, JavaScript, NodeJS.ReactJS

• Dev Tools: Git, GitHub, Docker, Simulation Tool

• Soft Skills: Troubleshooting, teamwork, problem-solving

• Database: PostgreSQL, Hadoop, MongoDB,

Oracle, Datamining

•Cloud/Web Service: AWS, Azure

• Visualization: Tableau, Power BI, SSRS

### **Professional Experience**

**Dallas Data Science Academy** – Remote Data Scientist; Irvine, TX

September 2021 – August 2022

- Designed and developed state-of-art deep-learning/machine-learning algorithms for analyzing the image and video data among others. Experience with **Tensor Flow, Theano, Keras**, and other **Deep learning Frameworks**, and optimization algorithms
- Implemented predictive models using machine learning algorithms linear regression, boosting algorithms and performed in-depth analysis, applied concepts of **R-squared**, **RMSE**, **P-value**, in the evaluation stage to extract interesting findings through comparisons, Implemented Frontend operation through **Flask/Streamlit**
- Created multiple Logistic Regression models that helped fine-tune fabrication process cycle times reduced from 6 hrs to 30 mins University of Missouri – Kansas City – *GRA/GTA*; Kansas City, MO

  August 2016 – Present
- Designed easy-to-follow visualizations using Tableau and published dashboards, and stories on web and desktop platforms
- Built Artificial Neural Network using **Tensor Flow** in **Python** to identify the customer's probability of canceling the connections Performed feature scaling, feature engineering, and statistical modeling
- Analyzed the surface of the materials by Scanning Electron Microscope (SEM), Atomic Force Microscope (AFM), device fabrication with Electron beam lithography (EBL), wet and dry etching, mask pattern, metal evaporation, worked in the cleanroom

### University of Maryland –Baltimore Country - GRA/GTA; Baltimore,MD

August 2015 – August 2016

- Analyzed historical sales data of 200+ products; utilized time-series forecast models to forecast sales; automated data collection and ensured ETL code was in adherence to business requirements, Instructor of Electrical Circuit-I (ECE-227)
- Gathered report requirements, collected data using SQL Script, and creating Power BI Reports; utilized Power BI Power Pivot to develop a data analysis prototype and used Power View and Power Map to visualize reports
- Scripted procedures and User Define Scalar Functions to be used in the SSIS packages and SQL scrips

### **Projects**

- Plant Disease Prediction: Predicted with CNN and an app is developed for internet users to predict disease
- Breast Cancer Classification: Classified data with all Supervised learning algorithms and compared the performance
- Stock Predictions: Predicted stock value from live Yahoo Finance.
- Object Detection Using YOLO: Detected Objects with OpenCV along with You Only Look Once (YOLO)
- Sentiment Analysis: Analyzed Customer sentiment with NLP

### **Education**

# University of Missouri Kansas City, MO

August 2016 – May 2023

Ph.D. in Computer Science Electrical Engineering, Major in Data Science, Nanofabrication (GPA: 3.85/4.00)

Master's in Data Science (GPA: 3.85/4.00)

#### University of North Dakota, ND

*January 2012 – August 2015* 

Master's in Electrical Engineering, Major in Data Science/Analytics (GPA: 4.00/4.00)

# Islamic University of Technology, Bangladesh

December 2004 – November 2008

Bachelor of Science in Electrical & Electronics Engineering, Major in Data Analytics (GPA: 3.67/4.00)

### **Publication**

Google Scholar Link



## **Selected Projects**

Project	Objective	Tools used	Performance
Sentiment Analysis with BERT Transformer	Implement BERT transformer for sentiment analysis and compare with other machine learning algorithm for predictive analysis	KNN BERT Transformer Nltk Wordlemmatizer SentimentIntensityAnalyzer	Accuracy: 78%
Plant Disease Prediction	Predict plant disease from leaf image using CNN and build a webapp to predict plant disease from uploaded image	Cv2 Tensorflow Keras Conv2D Adam Streamlit	Accuracy: 98%
Breast Cancer Classification	Predicting malign and benign by several machine learning algorithms and deep learning algorithms	SVC KNN Logistic Regression Neural network Seaborn Earlystopping Keras dropout GridSearchCV	Accuracy: 78%
Stock Predictions	Predict Tesla stock prices from yahoo finance and time series analysis by LSTM and predict stock price with Monte Carlo Simulation	Keras LSTM Sequential Monte-Carlo Datareader	Accuracy: 78%
Object detection using YOLO	Object detection from an image by You Only Look Once (YOLO)	CV2 Yolov3_small	Accuracy: 75%
Face Detection	Face detection from an image with MTCNN	Keras Tensorflow Mtcnn	Accuracy: 74%
Sentiment Analysis	Analyze customer sentiment with NLTK	Nltk Tfidfvectorizer Random forest	Accuracy: 83%
Statistical Learning	Analyze several dataset from CRAN to analyze with supervised and unsupervised learning algorithms with R	Ggplot2 Lm Glm Svc Knn Naïve bayes Decision tree Random forest XGBOOST K Means Clustering	