Mithun Ghosh

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EDUCATION

The University of Arizona   Dec 2021 (Expected)
Ph.D., Systems & Industrial Engineering   **3.87/4.0**
Bangladesh University of Engineering & Technology   September 2015
Bachelor of Engineering, Industrial & Production Engineering   **3.71/4.0**

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Technical Skills

Languages:	Python, R ,Java, Matlab, Julia, C++	**Database:**	MySQL
Data wrangling:	NumPy, Pandas	**Web scrapping:**	Beautiful Soup
ML & DL:	Scikit-learn, Keras, TensorFlow, nnet	**Data Visualization:**	Matplotlib, Seaborn, D3
NLP:	NLTK , TensorFlow	**Big data:**	Apache Spark (PySpark)

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PROFESSIONAL EXPERIENCE

The University of Arizona. Tucson, AZ – *Graduate Research Assistant*   Aug 2017 – Current

- Composed a **complex Bayesian regression framework**, adapted the **Gaussian Process** model with nonstationary data, and updated the hyperparameters to predict the anomalies in the process with 92% accuracy.
- Integrated **Classification** model for the X-ray images using **Deep Learning** tools like **CNN** for precisely detecting an X-ray image as normal or abnormal and expedited the detection process.
- Investigated the **Unstructured** data for the sentiment analysis using **Natural Language Processing tools** and developed a predictive model that has 9% more accuracy than the cutting-edge methods.

The University of Arizona, Tucson, AZ – *Curriculum Analytics Research Intern*   May 2020 – Current

- Conceptualized an online **Machine Learning** system with 10% improved efficacy of that state-of-the-art method to provide the Students progression scenario towards their degree.
- Extracted, transformed, and loaded Student data to generate Statistics, accelerated the decision-making process, and effectively brainstormed and communicated with a large team.
- Mined the online data using **Selenium** and coined a new evaluation criterion for the demand of different program's professions with a 20% higher chance for a successful career.

KOHINOOR CHEMICAL CO. (BD) LTD, Dhaka, Bangladesh – *Data Analyst Intern*   July 2014 – Sep 2014

- Applied statistical models to perform **Data analytics** for various production lines and boosted profits by 5% by contributing recommendations for business growth.
- Used SQL quarries and organized dashboards in Tableau to present the outcome to the supervisor regularly.
- Executed 5% growth in production lines productivity by time studying, also eliminated bottlenecks in some production lines with **Time Series Modeling**.

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DATA SCIENCE PROJECTS

Searching for the New Material Using Data Fusion   Jan 2019 - May 2020

- Simulated an efficient data fusion technique by transferring the information from other abundant sources to the scarce primary data and enhanced the outcome by 20% more compared to related methods.
- Supervised machine learning models in python to predict the most promising material for the capacitor.

Machine Learning – Regression and Clustering   Aug 2017 – Oct 2018

- Pioneered models to cluster the data by domain knowledge and applied machine learning to each cluster to study the process parameters in the glass industry with reduced complexities.
- Executed Python libraries like **Numpy, Pandas, SciPy, Matplotlib, Scikit-learn** to find the best predictive model.