

EDUCATION

- **BRAC University** Dhaka, Bangladesh
Bachelor of Science in Computer Science Jan 2012 – Aug 2016
 - **CGPA:** 3.75/4.00 (Dean's List).
 - **Recipient:** Merit Based Scholarship for the duration of the entire program.

WORK EXPERIENCE

- **Therap (BD) Ltd.** Dhaka, Bangladesh
Software Engineer II, Machine Learning Oct 2019 - Present
 - **Responsibilities:**
 - * Lead the newly established Machine Learning department.
 - * Create a team from the ground up by hiring and training new talent.
 - * Explore the business potential in the analysis and inference of real-time time-series sensor data received through IoT devices.
 - * Experience gathering and creating reliable datasets with the help of services like Amazon Ground Truth.
 - * Experience cleaning, processing, and visualizing data for insight and interpretability by leveraging the rich ecosystem of Python open-source data science packages like Pandas and Numpy.
 - * Experience training, tuning and deploying models for batch and real-time inference using cloud services provided by AWS and GCP.
 - * Experience monitoring, optimizing, and updating models with zero down-time.
 - **Related Technologies:** Python, Numpy, Pandas, Matplotlib, Seaborn, Scikit-Learn, Keras, TensorFlow, PyTorch, Amazon SageMaker, Google Cloud AI Platform
- **Therap (BD) Ltd.** Dhaka, Bangladesh
Software Engineer, Full Stack Web Development Oct 2016 - Sep 2019
 - **Responsibilities:**
 - * Experience developing and maintaining Java EE, SaaS applications.
 - * Strong understanding of Object Oriented Programming, Design Patterns, Data Structures, and Algorithms.
 - * Thorough understanding of RDBMS and a demonstrated ability in database design.
 - * Extensive experience working with Oracle WebLogic Server, Oracle Database and other Oracle Enterprise tools.
 - * Experience in Agile software development methodologies and Test Driven Development.
 - * Experience with Version Control Systems such as Git, Github, and Bitbucket.
 - * Experience with dependency management and build tools such as Ant, Maven, and Gradle.
 - * Adept at configuring and deploying applications in Unix-like systems.
 - * Expertise in HTML, CSS, Javascript and its many libraries.
 - **Related Technologies:** Spring MVC, Hibernate ORM, SQL, Bash
- **BRAC University** Dhaka, Bangladesh
Teaching Assistant Jan 2014 - Aug 2016
 - **Data Structures and Discrete Mathematics:**
 - * Grade quizzes.
 - * Provid one-to-one consultations and exam hall invigilation.
 - * Assemble and distribute supplementary study materials.

PROJECTS

- **IMDB Sentiment Analysis Web App** Dhaka, Bangladesh
Amazon SageMaker Demonstration Dec 2019
 - **Particulars:**
 - * Train and deploy a custom Pytorch LSTM model in Amazon SageMake.
 - * Create a AWS Lambda function that invokes the model's inference endpoint.
 - * Create a Amazon API Gateway that calls the lambda function upon a HTTP POST request passing in the user review and returning back the prediction.
 - * Link to Github
- **We Are X, A Customer Service Provider Firm** Dhaka, Bangladesh
Machine Learning Engineer (Contractual, Remote) Oct 2018 - Mar 2019
 - **Customer Query Classification:**
 - * Train a tf.Estimator model capable of classifying customer queries into 9 categories.
 - * Deploy the model in Google Cloud ML Engine.
 - * Expose REST endpoint for real-time inference.
 - **Outcome:**
 - * X was finding it difficult to scale to the growing number of customer queries by hiring and training new customer service representatives.
 - * My AI system improved existing customer service representative throughput by 3x allowing X to meet market demand keeping existing infrastructure intact.
 - * Currently X is thinking of ways to integrate the system more deeply into their workflow.

COURSES AND CERTIFICATES

- **Machine Learning Engineer Nanodegree**
Udacity Nov 2019 - Present
 - **Ongoing:** Link to Github.
- **Machine Learning with TensorFlow on Google Cloud Platform Specialization**
Google Cloud Authorized Online Training
 - **End-to-End Machine Learning with TensorFlow on GCP by Google Cloud on Coursera.** Certificate earned at Saturday, January 12, 2019 4:58 AM GMT: Link to Certificate.
 - **Intro to TensorFlow by Google Cloud on Coursera.** Certificate earned at Thursday, January 3, 2019 5:01 PM GMT: Link to Certificate.
- **Deep Learning Specialization**
Online Courses Taught by Professor Andrew Ng of Stanford University Dec 2016 - Mar 2017
 - **Deep Learning, a 5-course specialization by deeplearning.ai on Coursera.** Specialization Certificate earned on April 9, 2018: Link to Certificate.
 - **Sequence Models by deeplearning.ai on Coursera.** Certificate earned at Monday, April 9, 2018 1:34 AM GMT: Link to Certificate.
 - **Convolutional Neural Networks by deeplearning.ai on Coursera.** Certificate earned at Saturday, March 10, 2018 4:36 PM GMT: Link to Certificate.
 - **Structuring Machine Learning Projects by deeplearning.ai on Coursera.** Certificate earned at Monday, January 22, 2018 12:32 PM GMT: Link to Certificate.
 - **Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization by deeplearning.ai on Coursera.** Certificate earned at Wednesday, January 17, 2018 5:16 PM GMT: Link to Certificate.
 - **Neural Networks and Deep Learning by deeplearning.ai on Coursera.** Certificate earned at Friday, January 12, 2018 5:45 AM GMT: Link to Certificate.