

EDUCATION

- **BRAC University** Dhaka, Bangladesh
Bachelor of Science in Computer Science; CGPA: 3.75
Jan 2012 - Aug 2016
- **Udacity** Dhaka, Bangladesh
Machine Learning Engineer Nanodegree
Nov 2019 - Present

WORK EXPERIENCE

- **Therap (BD) Ltd.** Dhaka, Bangladesh
Machine Learning Engineer
Oct 2019 - Present
 - **Responsibilities:**
 - * Lead the newly established Machine Learning team.
 - * Working on Human Activity Recognition (HAR) from triaxial accelerometer and gyroscope data received from smartwatches.
 - * Exploring Machine Learning backed solutions to problems in the Intellectual and Developmental Disability (I/DD) space.
 - **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
Oct 2016 - Sep 2019
 - **Responsibilities:**
 - * Experience developing and maintaining Java EE and 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.
 - * 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.
 - * Provide one-to-one consultations.
 - * Assemble and distribute supplementary study materials.

PROJECTS

- **Plagiarism Detection** Dhaka, Bangladesh
Detect plagiarized text
Dec 2019
 - **Particulars:**
 - * Examine a text file and perform binary classification. Identifies whether the text is plagiarized depending on how similar it is to a provided source text.
 - * As a measure of similarity, calculate Containment and Longest Common Subsequence (LCS) features suggested by the relevant paper.
 - * Train and deploy a Scikit-Learn SVC model using the Amazon SageMaker managed environment.

- **Sentiment Analysis Web App** Dhaka, Bangladesh
Classify a movie review as positive or negative *Dec 2019*
 - **Particulars:**
 - * Use the IMDB Movie Reviews dataset to train a custom PyTorch LSTM model.
 - * Deploy the model in Amazon SageMaker and expose a public REST endpoint with the help of AWS Lambda functions and Amazon API Gateway for real-time prediction.
 - * Link to Github
- **Online Customer Query Classification** Dhaka, Bangladesh
Multi-class, multi-label text classification for We Are X *Oct 2018 - Mar 2019*
 - **Particulars:**
 - * We Are X provides online customer service support for large corporations and their customers.
 - * They were finding it difficult to scale to the growing number of customer queries.
 - * So I trained a TensorFlow Estimator model in Google Cloud ML Engine capable of classifying 9 categories of customer queries written in English and Bengali and served it using TensorFlow Serving for fast, concurrent usage.
 - * This improved existing customer service representative throughput by 3x allowing them to meet market demand keeping existing infrastructure intact.

ACHIEVEMENTS

- **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.](#)