## M. Saiful Bari

## CAREER OBJECTIVES

I am a Computer Science enthusiasts working on achieving of my dream to build Semi-unsupervised NLP Brain.

#### PASSION AND EXPERIENCE

SEPT 2017 - SEPT 2018

Nanyang Technological University

#### Research Assistant

Working on **NER**, **Word Translation** and **Machine Translation system**. Building a MT system for low resource language **English-Malay**.

DEC 2012 - PRESENT

Problem Solver

### Competitive Programmer

Loves to solve different kinds of algorithmic and data structure based problem. Solve problem through codeforces, topcoder, lightoj, uva, codechef, hackerrank, projecteuler, coci, usaco. Solved around **2000 problems** in various online judge.

OCT 2018 - JAN 2019

Aubichol IT Limited

## Software Engineering Intern

Working on an early startup where the key responsibility was to design the architecture of sports analytic and Translation System.

Nov 2015 - Dec 2015

XeonBd

## Software Engineering Intern The course

of the internship goes through Cloud Computing.

JAN 2015 - SEP 2016

Islamic University of Technology, East West University, Khulna University of Science and Technology

## Competitive Programming Trainer

Responsibility is to train university students about algorithmic problems and taking contest.

JAN 2015 - DEC 2015

HITCS

# Secretary of Programming and Algorithms

Arranging and coordinating IUT 8th National Programming Contest.

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JUNE 2017 - SEPT 2017

Southeast University

#### Lecturer

Teach Introduction to C, Algorithms.

#### **EDUCATION**

2001-2010 Government Laboratory High School

Secondary School Certificate, Dhaka Board (Science), **GPA**:

5.0/5.0

2010-2012 Dhaka City College

Higher Secondary Certificate, Dhaka Board (Science), **GPA**:

5.0/5.0

2012-2016 Islamic University of Tech-

nology

Bachelor of Science (BSc.), Computer Science and Engineering, **CGPA: 3.65/4.0** 

2019-CURRENT Nan

Nanyang Technological University

Phd Student,

School of Computer Science

and Engineering

#### SKILLS

PROBLEM SOLVING Algorithms & Data

Structure, Deep

Learning

LANGUAGE C++, Python

LIBRARY Tensorflow

ENVIRONMENT Linux

COMMUNICATION SKILL Excellent

PERSONALITY Motivating, dedicated,

team-wolf

2014 Champion

*IUT Computer Programming Contest* 

2014 Honorable Mention

Human Expedition on Mars-Timeline 2018

2014 **15th in IUPC** 

*Quazi Azher Ali International Programming Contest (QAAIPC)* 

2015 Champion

IUT Computer Programming Contest

'14-'15 **37th, 36th** 

International Collegiate Programming Contest

2016 **15Th in IUPC** 

SUB Inter University Programming Contest 2016

2016 **2nd in IUPC** 

Daffodill International University ACM ICPC world finals warmup contest 2016

2016 **6th in IUPC** 

NSU Cybernauts National Programming Contest

2013-2016 **LightOj** 

Global Rank: 31 Total Problem: 342

#### **PROJECTS**

JAN 2013 - APR. 2013

Game

#### Sudoku Solver

A Sudoku solver using Backtracking, branching, bounding and pruning. Developed in C++. No GUI. Updated it with Algorithm X.

DEC 2013 - PRESENT

Game

#### Chess Game

This project is aimed to develop a code that will suggest the next possible best move of the current board from both black and white side. Main idea is alpha-beta pruning, backtracking and branching bounding using mini-max algorithm. Developing in C++. No GUI. Credit: Bluefever soft, Chess Engine: Vice.

JAN 2014 - APR 2014

System Design

## National Population Census

A government shadow project on "National Population Census". Real data and tabulation sheets are used for evaluation purpose with the permission of authority.

Management System

## Library Management System

This project is aimed to develop an up and running software for library management system with RFID verification tag designed in Arduino. It was developed in JAVA with Oracle Database in the backed. [ Partner : Junayed Ahmed , IUT'12 ]

SEPT. 2015 - SEPT. 2015

Unix API

icd

This project is developed to function traditional cd with inode value.

DEC 2015 - ON HOLD

Machine learning system

## A CBIR System

This project is aimed to develop a CBIR(Content-based image retrieval) system with better accuracy. Yet the accuracy of a CBIR system is not very easy to calculate without truth value(Ranking truth value). Currently accuracy is around 40%-50% using IN-RIA CBIR training data-sets.

SEP 2017 - NOV 2017

Deep learning

## Named Entity Recognition System

A word level LSTM based deep learning system where we can correctly identify 17 types of IOBES tagged Named Entity. F1 score: English 91.15, Dutch: 81.83, Spanish: 86.66 on CoNLL 2017 task dataset.

NOV 2017 - CURRENT

Deep learning

## Unsupervised Named Entity Recognition

Working on state of the art cross-lingual named entity recognition.

JAN 2018-JAN 2018

Deep learning

## Word Translation without parallel data

Re-implement the model proposed by lample&Conneau without refinement using adversarial learning. This model is the main reason behind the success of unsupervised Neural Machine Translation.

MAY 2018- CURRENT

Deep learning

## Neural Machine Translation System

I have built a Neural Machine Translation System for english-malay language to find and explore the opportunity for Unsupervised Machine Translation system. Right now we are building seq2seq based model.