

# S. MAHMUDUL HASAN

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## EDUCATION

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**Bangladesh University of Engineering and Technology, Dhaka**

2014 - 2018

B.Sc Engg. in Computer Science and Engineering (CSE)

CGPA: 3.65 / 4.00

## STANDARDIZED TEST SCORES

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**GRE: 328 / 340**

Quantitative	Verbal	Analytical Writing
167 (90 <sup>th</sup> Percentile)	161 (88 <sup>th</sup> Percentile)	4.5 (81 <sup>st</sup> Percentile)

**TOEFL: 113 / 120**

Reading	Listening	Speaking	Writing
30	29	24	30

## RESEARCH INTEREST

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I am interested in the applications of Deep Learning, Machine Learning and Reinforcement Learning in Computer Vision, Natural Language Processing, Robotics and Generative Models (e.g., GANs).

## RESEARCH

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**Generative model for generating faces\***

(\*On going project)

*Deep Learning*

Working on generating faces using Generative Adversarial Networks.

**A configurable platform for data accumulation and annotation\***

(\*On going project)

*Software / Research Tool*

A project to build a platform for data accumulation and annotation for different machine learning and deep learning tasks.

**Undergraduate Thesis**

*Data Mining*

Accumulated data on different diseases' natures and their outbreaks, and different socioeconomic conditions of different countries around the world. Analyzed the data using different statistical and machine learning techniques to infer the potential socioeconomic factors that can contribute to disease outbreaks.

**Supervisor:** A. B. M. Alim Al Islam

**Research Paper**

*Revealing Influences of Socioeconomic Factors over Disease Outbreaks*

A paper ready to be submitted based on undergraduate thesis work.

## WORK EXPERIENCE

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**Canadian University of Bangladesh, Dhaka**

February 2019 - September 2019

*Lecturer, Department of CSE*

Instructed courses (including labs) on Structured Programming Language, Compilers, Computer Networks and Mobile Application Development.

**REVE Systems, Dhaka**

April 2018 - July 2018

*Intern*

Worked on development of Bangla Text To Speech (TTS) systems. Developed a system for collecting and annotating Bangla speech data.

**Bangladesh University of Engineering and Technology**

August 2017 - October 2018

*Undergraduate Researcher, Department of CSE*

Worked on collection of disease outbreak data, disease nature data and data on socio-economic factors of different countries of the world. Did thesis on discovering potential socio-economic factors for disease outbreaks.

## TECHNICAL STRENGTHS

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<b>Programming Languages</b>	C/C++ , Python , Java, JavaScript, Assembly
<b>Markup Languages</b>	HTML, XML, $\text{\LaTeX}$ , Markdown
<b>Database</b>	MongoDB, MySQL, Oracle
<b>Machine Learning</b>	Keras+Tensorflow, PyTorch
<b>Software &amp; Tools</b>	Git, Android SDK, JavaFX, Tkinter, Python Flask, Ionic Framework

## SELECTED PROJECTS

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### **Image Data Collection System**

Image data collection and labeling system built using Ionic framework and Python Flask.

### **Bangla Handwritten Digit Recognition**

Implemented CNN based classifier for Bangla handwritten digit recognition which achieved 89% accuracy on data collected through Image Data Collection System.

### **Smile Detection**

Implemented CNN based classifier (93% test accuracy) for detecting smile and implemented code for using the trained classifier in realtime.

### **BrackFire**

Fire service calling and tracking application built using Android SDK, Firebase API and Firebase Cloud Messaging (FCM) API.

### **FileShare**

A two part system, for file sharing between Windows, Android and Linux using a common Wifi network, built using JavaFX and Android SDK.

**More at:** <https://numan947.github.io>

## AWARDS AND SCHOLARSHIPS

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<b>Dean's List</b>	January, 2014
<b>University Stipend</b>	July, 2014
<b>Board General Scholarship</b>	HSC (2013)

## EXTRA CURRICULAR ACTIVITIES

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### **Competitive Programmar**

Used to solve programming problems and take part in Competitive Programming Contests

UVA Profile Link: <https://uhunt.onlinejudge.org/id/404339>

## REFERENCES

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**A. B. M. Alim Al Islam**

Associate Professor,

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BUET, Dhaka.

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