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## Skills

### Languages:

- **Proficient:** C/C++, Python, Javascript.
- **Worked with:** Java, Node js, Angular 6, AWS.

### Technologies:

- Keras, Tensorflow, Pytorch, MySql, Django, Android, Node js, Angular 6, Git, AWS.

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## Education

**Savar, Dhaka** **Jahangirnagar University** **Jan. 2013 - Jun. 2018**  
• B.Sc. in Computer Science and Engineering, Jun. 2018. **CGPA: 3.70 out of 4.**

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## Experience

**Software Engineer** **Crowd Realty, Japan** **Nov. 2019 - Present**  
• Design and development of API using **Python**, **Django** and Node js.  
• Design and development of P2P platform infrastructure.  
• Design and development of business system specialized in financial services.  
• Fintech data analysis using different kinds of statistical or deep learning based algorithms.

**Software Engineer** **BJIT, Japan** **Nov. 2018 - Oct. 2019**  
• **Carry Park Service (Jun. 2019 - Oct. 2019):** Developed bluetooth service for Android to BLE devices connection.  
• **AI Chatbot (Apr. 2019 - Oct. 2019):** Built a chatbot using Keras library. Sentiment analysis on Japanese text. Responsible for design and development of rest API using **Django** and **Angular 6**.  
• Object tracking in video using person re-identification approach using **python**.

**Software Engineer Intern** **AnyConnect IoT** **Apr. 2018 - Oct. 2018**  
• Worked on a project for object detection, face recognition in video using Python, C++, OpenCV and Tensorflow in IoT devices.  
• Worked on an application which downloads MPEG-DASH video into openCV mat format.

**Teaching Assistant** **Jahangirnagar University** **Sept. 2017 - Mar. 2018**  
• Trained and supervised students in algorithm and data structure.

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## Publications

- Statistical Modeling of Traffic Congestion using Google Map Traffic Layer Data. (Accepted for FICC 2021, Vancouver, Canada)
- Bangla Optical Character Recognition and Text-to-Speech Conversion using Raspberry Pi. (Published in IJACSA, Vol. 11, No. 6, 2020)
- Recognition of Local Birds of Bangladesh using MobileNet and Inception V3. (Published in IJACSA, Vol. 11)
- Efficient Advertisement Slogan Detection and Classification Using a Hierarchical BERT and BiLSTM-BERT Ensemble Model. (Submitted in ICO2020, Thailand and waiting for the verdict)
- Bangla Document Classification Using Character Level Deep Learning. (Submitted in ICMLANT 2020, India and waiting for the verdict)
- Local Bird Recognition Using Transfer Learning. (Submitted in MLN'2020, France and waiting for the result)

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## Achievements

### Programming Contest Experience

- Placed **1<sup>st</sup>** out of 41 teams in Jahangirnagar University(Bangladesh) Inter Dept. Programming Contest 2017.
- Placed **3<sup>rd</sup>** out of 150 teams in National (Bangladesh) Collegiate Programming Contest 2017 (Bangladesh).
- Placed **3<sup>rd</sup>** out of 117 teams in IUT (Bangladesh) 9<sup>th</sup> ICT FEST 2017.
- Placed **4<sup>th</sup>** out of 102 participants in NSU (Bangladesh) Inter University Programming Contest Spring 2017.
- Placed **5<sup>th</sup>** out of 106 teams in Bangladesh University of Engineering and Technology CSE Day 2016.
- Placed **12<sup>th</sup>** out of 123 teams in ACM-ICPC Asia Dhaka(Bangladesh) Regional Contest 2016.

### Online Problem Solving

- **Codeforces** - max rating 2021 (among 1%), Username: [mahbucseju](#).
- **Codechef** - max rating 2309 (among 1%), Username: [mahbucseju](#).
- **Hackerrank** - max rating 2345 (among 1%), 13 gold medal, 11 silver medal, 6 broze medal, Username: [mahbucseju](#).
- Placed **50<sup>th</sup>** in **Google Kickstart 2017 - Round F** out of **1722** participants.

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## Personal Projects. <https://github.com/mahbucseju/>

- Built a deep learning based model for predicting clinical events using recurrent neural network.

- Plant disease detection for two different datasets (rice, mango) using SVM, Bayesian and deep learning based classifiers (VGG16, Mobilenet, Inception3, Rasnet, Densenet).
- Image classification for about 10 different datasets using deep learning based classifiers (VGG16, Mobilenet, Inception3, Rasnet, Densenet) and transfer learning.
- Text classification using CNN and character level CNN approach.
- Object detection using Tensorflow object detection API.
- Football tracking on real time video using deep learning.
- Image editing tool for stitching two or more images using MATLAB.
- MPEG-DASH video downloader to download MPEG-DASH video into OpenCV mat format using C++, Python.
- Side channel attack on elliptic-curve cryptography for BLS curve using C, C++, Python.
- Developed a web platform for food delivery service of using Python, Django , HTML, CSS, Javascript.

### Certifications

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- **Title:** Neural Networks and Deep Learning, **Issuing Organization:** Coursera, **Credential:** 6EWNLF6MAFJW
- **Title:** Artificial Intelligence A-Z™: Learn How To Build An AI !, **Issuing Organization:** Udemy, **Credential:** UC-HIFTT79A
- **Title:** Deep Learning and NLP A-Z™: How to create a ChatBot !, **Issuing Organization:** Udemy, **Credential:** UC-9UWVFG2S
- **Title:** Deep Learning, Transfer Learning and Turtles, **Issuing Organization:** Udemy, **Credential:** UC-SKLLIA0K
- **Title:** Internet Of Things- From Beginner To Making You First Device, **Issuing Organization:** Udemy, **Credential:** UC-GPI5ZE8S

### Additional Experience and Awards

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- **Researcher (Jul. 2018 - Aug. 2018):** Participated in a short research on elective curve cryptography in **Okayama University, Japan.**
- **Certification (Oct. 2018):** Placed 2<sup>nd</sup> in Information Technology Professionals Exam (**ITEE FE October 2018**) from Bangladesh.
- **Campus Ambassador, GeeksforGeeks (Aug. 2018 - Oct. 2018):** Responsible for conducting workshops, seminars in Jahangirnagar University
- **Problem Setter (2017 – 2018):** Bangladesh National Girls Collegiate Programming Contest, Jahangirnagar University Intra University Programming Contest and some other national online contests.
- **Programming Camp (2016):** Placed 3<sup>rd</sup> in National (Bangladesh) Programming Camp 2016.
- **Leadership Experience (2017-2018):** Manager of Jahangirnagar University programming club.