Hossain Muhammad Saddam

Address: Level 5, H 18, R 20, Nikunja 2, Dhaka 1229, Bangladesh. Phone: +8801521236005,
Email: mshossaincse@gmail.com, GitHub, LinkedIn

EXPERIENCE

Machine Learning Engineer Jun. 2021 -
Chowagiken Corporation *Hokkaido, Japan.*

- Accomplished a bunch of diverse machine learning solutions. • My key role was model building, fine-tuning, performing ETL, data augmentation, and visualization. • Besides, I played some roles in project management.

Machine Learning Intern (Remote) Mar. 2021 - Jun.2021
Chowagiken, Corporation *Hokkaido, Japan*

- Accomplishing a couple of projects during this period. Detecting and identifying *Rolex wristwatch reference recognition* using the metric learning method called *Triplet network* on top of transfer learning *ResNet-50* and the Japanese famous painting *Ukiyo-e* like style generation using *Cycle-GAN*.

Machine Learning Engineer Intern Jan. 2021 - Mar. 2021
BJIT Ltd. *Dhaka, BD*

- Developed basic machine learning skills such as Regression, Classification and clustering techniques. • For instance, I implemented logistic regression, decision tree, SVM and K-means. • In addition to that, I also learned basic natural language processing methods.

Web Development Intern Oct. 2020 - Dec. 2020
Orbund LLC *Dhaka, BD*

- Contributing to the **student management system** for a USA-based client. • I was adding a feature to the system which was monthly student report generation. • Working as a full-stack developer during this period. • We used the Java-based framework JSP as the backend, and web technology JS, Jquery, HTML, and CSS as the frontend.

SKILLS

Python (Expert), JAVA, C/C++ (Intermediate), MySQL, SQLite, Pytorch(Expert), TensorFlow, Sk-learn, Pandas, NumPy, SpaCy. GCP(Expert), Floydhub(Intermediate), AWS(Familiar), Git, GitHub, Gitlab, Docker, Kubernetes.

PROJECTS

Semiconductor patent analysis, Tokyo Electron (Python, Pytorch, ReactJS**):**

- Figuring out the actual patent gazette number • We implemented *SVM* and customized *BERT* for the patent classification task. • In addition, we visualized classified patents in the web graphical UI.

Toyota Text Classification using BERT (Python, Pytorch, SpaCy**):**

- To apply a simple rule-based method for initial classification results. • Preparing annotation datasets and upscale the performance nearly 85% accuracy. • I was the key developer and overall manager of the data preparation and annotation task for the team. I made some key decisions which were recognized by the clients.

Bird Nest Detection (Python, Pytorch**)**

- To perform data *augmentation* and *ETL* process. • As initial phase, we utilized ResNet-50 pretrain model and generated 70% accuracy. • Immediately *Meta* release their *detectron2* and we applied and got client satisfactory 93.92% accuracy.

EDUCATION

Bachelor of Engineering in Computer Science and Engineering Jun. 2013 – Jul. 2018
Shahjalal University of Science and Technology Sylhet, Bangladesh

PUBLICATIONS

"Bangla Word Clustering Based on Unigram to Hexa-gram Language Model" | 2016 View Publication

- On the basis of semantic and contextual similarity, using probability distribution methodology and N-gram language model. • To observe, the 5-gram model is the best among the six.
- **Supervisor**: Sabir Ismail, Assistant Professor, Department of Computer Science and Engineering, SUST.