SHAMIM MAHBUB

+88017-20506729 | sha237mim@gmail.com | GitHub
Google Scholar | LinkedIn

Enthusiast of Machine Learning, Deep Learning, Computer Vision, and NLP. Experienced in working with image datasets, pattern recognition, object detection, image segmentation, web-scraping, AI Chatbot, and medical imaging by implementing ML/DL/NLP models. Research experiences in AI and Medical Imaging fields. I want to explore and solve real-world problems through the integration of Artificial Intelligence.

WORK EXPERIENCES

- **Machine Learning Engineer,**
  Spekter GmbH
  Adabor, Dhaka.
  Jan 15, 2024 - Present
- **Software Engineer (AI & NLP),**
  SkyRanko
  Vodra Road, Rajshahi.
  Jan 2023 – Dec 2023 (Contractual)
- **Software Engineer (NLP),**
  Zibew E-commerce PTE Ltd.
  Bayshore Road, Singapore (Remote).
  Mar 10, 2022 – Dec 15, 2023 (Approx. 9 months)
  - To develop and integrate AI Chatbots for different platforms according to the client's preference.
  - To research and development an AI chatbot to achieve industrial remarks.
  - To scrape data from website and do data analysis.
- **Artificial Intelligence Engineer,**
  Opus Technology Ltd.
  85/3 Aminul Castle, Kakrail, Bangladesh.
  Jul 10, 2021 - Feb 28, 2022 (Approx. 8 months)
  - Developed an AI BOT for a renowned fps game names CS: GO using Reinforcement Learning.
  - Developed an AI Chatbot for company's website.

SKILLS

- **Programming Language:** Python (Experienced), C (Immediate) & SQL.
- **Framework:** Keras, Tensorflow, Scikit-Learn, PyTorch
- **Libraries:** Transformers, NLTK, SpaCy, NumPy, SciPy, Matplotlib, Pandas, OpenCV, Beautiful Soup & etcetera.
- **Tools:** Git & GitHub, Ngrok, Flask, Docker, FastAPI & Selenium.
- **Cloud:** Heroku, Azure & AWS.
- **Others:** HuggingFace, MySQL, SQL Server, Microsoft Bot Framework & RASA.

RESEARCH EXPERIENCES

- **Research Assistant (RA),**
  Electrical & Electronic Engineering Lab, RUET.
  Jul. 2022 – Dec. 2022
  Responsibility: To study and build robust Deep Learning model for "Detecting Sleep Apnea using Single Lead Electrocardiogram Signal".
  Supervisor: Dr. Mohammod Abdul Motin, Assistant Professor, Dept. of EEE, RUET.
- **Undergraduate Thesis:**
  - Exudates Detection and Classification from Retinal Fundus Image using DCNN.
  - Performance Analysis of Bangla Sign Digit Classification Using Machine Learning Classifiers.

  Supervisor: Md Ferdous Wahid, Assistant Professor, Department of EEE, HSTU.

PUBLICATIONS

- Hasan, M. J., **Mahbub**, S., Alom, M. S., & Nasim, M. A. (2019, May). Rice disease identification and classification by integrating support vector machine with deep convolutional neural network. In *2019 1st international conference on advances in science, engineering and robotics technology (ICASERT)* (pp. 1-6). IEEE. **(Citations- 80)**
- Wahid, M. F., Hasan, M. J., Alom, M. S., & **Mahbub, S**. (2019, July). Performance Analysis of Machine Learning Techniques for Microscopic Bacteria Image Classification. In *2019 10th International Conference on Computing, Communication and Networking Technologies (ICCCNT)* (pp. 1-4). IEEE. **(Citations- 10)**
- **Mahbub, S.**, Wahid, M. F., Islam, S. M. S., Elahi, T. A., Shahriar, M. F., & Rashid, M. A. M. (2021, July). Comparison of Handcrafted and Deep Neural Network Feature Extraction for Recognizing Bangla Sign Digits Exploiting Machine Learning Classifiers. In *2021 12th International Conference on Computing Communication and Networking Technologies (ICCCNT)* (pp. 1-5). IEEE. (**Citations- 1**)

EDUCATIONS

- **B.Sc. (Engg.)** *in* **Electrical & Electronic Engineering,**
  Hajee Mohammad Danesh Science & Technology University (HSTU), Dinajpur, Bangladesh.
  CGPA: 3.34/4.00, **Session:** 2016-2019
- **Higher Secondary Certificate (HSC)** *in* **Science,**
  Rajshahi Govt. City College, Rajshahi.
  GPA: 4.75/5.00, **Session:** 2013-2015
- **Secondary School Certificate (SSC)** *in* **Science,**
  Paschim Naogaon High School, Naogaon.
  GPA: 5.00/5.00, **Session**: 2013

SELECTED PROJECTS

- Conversational AI Chatbot using NLP and SpaCy
- Neural Machine Translation
- Text Summarization
- Stock Price Prediction S&P500
- Cavity Segmentation from X-ray Images of tooth using U-net
- Bangla Sign Language Digit Classification
- Diabetic Retinopathy Classification using Fundus images
- Breast Cancer Image Classification

RELEVANT COURSEWORK

- Machine Learning
- Building Systems with the ChatGPT API
- ChatGPT Prompt Engineering for Developers
- Convolutional Neural Network in Tensorflow
- Introduction to Computer Vision with Watson and OpenCV
- Deep Learning Specialization
- Natural Language Processing Specialization
- Introduction to Reinforcement Learning Algorithms

EXTRA-CURRICULAR ACTIVITES

- Membership Committee Convener, IEEE HSTU Student Branch
- Joint Secretary, EEE CLUB OF HSTU
- Volunteer, National High School Programming Contest
- Member, HSTU Light Followers

LANGUAGES

- Bangla (Native)
- English