Amir Hossain Raj

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EDUCATION

Bachelor of Science in Computer Science and Engineering   2016 - 2021

Ahsanullah University of Science and Technology, Dhaka

CGPA: 3.852/4.00

WORK EXPERIENCE

Lecturer   November 2021 - Present

Department of Computer Science and Engineering

Ahsanullah University of Science and Technology

Associate Software Engineer   January 2021 - November 2021

Brain Station 23, Dhaka, Bangladesh

· Worked with Research and Development Team as a Machine Learning and AI Engineer

Software Engineer (part-time)   April 2021 - July 2021

Pioneer Alpha, Dhaka, Bangladesh

· Developed a full-stack web application using React, Node and AWS to provide an online educational platform

RESEARCH INTERESTS

AI, Machine Learning, Deep Learning & its applications, Computer Vision, Natural Language Processing

UNDERGRADUATE THESIS

Video Captioning in Bengali using Deep Learning   2019-2020

Topic: Sequence to Sequence Model, Attention Mechanism

Developed a novel deep learning architecture to describe any short video clip with a single Bengali sentence.

PUBLICATIONS

- **Amir Hossain Raj**, Ashek Seum, Aurpan Dash, Saiful Islam, Faisal Muhammad Shah, **"Deep Learning Based Video Captioning in Bengali"**, The 26th IEEE International Conference on Automation and Computing (ICAC'21)

- Saiful Islam, Aurpan Dash, Ashek Seum, **Amir Hossain Raj**, Tonmoy Hossain, Faisal Muhammad Shah, **"Exploring Video Captioning techniques: A Comprehensive Survey on Deep Learning Methods"**, SN Computer Science 2, no. 2 (2021): 1-28.

- Ashek Seum, **Amir Hossain Raj**, Shadman Sakib, Tonmoy Hossain, **"A Comparative Study of CNN Transfer Learning Classification Algorithms with Segmentation for COVID-19 Detection from CT Scan Images"**, In 2020 11th International Conference on Electrical and Computer Engineering (ICECE), pp. 234-237. IEEE, 2020

TECHNICAL SKILLS

Languages	Python, Java, C++, JavaScript, MATLAB, C#, SQL
Database	My SQL, Microsoft SQL Server, Oracle 10g., MongoDB, PostgreSQL, DynamoDB
Frameworks	Node.js, React, AWS Serverless
Deep Learning Tools	Keras, PyTorch, TensorFlow
Miscellaneous	Git, HTML, CSS, Arduino, Android, LaTex

PROFESSIONAL DEVELOPMENT

Deep Learning   Jun 2020 - Aug 2020

deeplearning.ai, Coursera 'Specialization'

· Five course specialization covering Convolutional Neural Networks, Recurrent Neural Networks, Hyperparameter tuning, etc.

ACHIEVEMENTS AND PARTICIPATION:

- "Dean's List of Honor" (based on B.Sc. result)

- Secured **2nd position** in Intra AUST Programming Contest Fall-17

- Participated in Intra AUST Programming Contest Spring-16, Spring-17, Fall-18

- Participated in Hackathon at BUP ICT Fest-2018

- Participated in Idea Contest in FABFEST-2018 by FABLAB DU at University of Dhaka

- Participated in Line Following Robot event at Intra AUST Technomania Spring 2016

REFERENCES

Faisal Muhammad Shah

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Dept of Computer Science and Engineering
Ahsanullah University of Science and Technology
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Mir Tafseer Nayeem

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