SUMAITA BINTE SHORIF

Dhaka, Bangladesh

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RESEARCH INTEREST

Computer Vision, Image Processing, Artificial Intelligence, Deep Learning, Machine Learning and Intelligent Systems Development

EDUCATIONAL QUALIFICATION

Jahangirnagar University

Feb 2019 - Present

4th Year B.Sc. in Computer Science and Engineering Student

CGPA: 3.76/4.00 (Rank: 3/59)

(Awarded Merit Scholarships in All Semesters till now)

Ongoing Research Project: Classification of Butterfly Images Using Deep Learning and Bag-of-Feature

TEST SCORE

IELTS Overall Band Score: 7.5 (R-7.5 L-7.5 S-7.5 W-6.5), CEFR Level: C1

PUBLICATIONS & PREPRINTS

- MultiResEdge: A Deep Learning-Based Edge Detection Approach. Kanija Muntarina, Rafid Mostafiz, Fahmida Khanom, Sumaita Binte Shorif, Mohammad Shorif Uddin. Published in Intelligent Systems with Applications, Elsevier (WoS, Scopus, Q1) vol. 20, November 2023. [Paper]
- A Dataset for Successful Recognition of Cucumber Diseases. Nusrat Sultana, Sumaita Binte Shorif, Morium Akter, Mohammad Shorif Uddin. Published in Data in Brief, Elsevier (WoS, Scopus, Q2) vol. 49, August 2023. [Paper]
- Eiwalker: An Enriched Intelligent Walker for Comprehensive Elderly Care Using Machine Learning and Natural Language Processing. Shinthi Tasnim Himi, Natasha Tanzila Monalisa, Sumaita Binte Shorif, Sabrina Sharmin, M. Shamim Kaiser, Mohammad Shorif Uddin. 06 Dec 2023. [SSRN]
- Notes on edge detection approaches. Kanija Muntarina, Sumaita Binte Shorif, Mohammad Shorif Uddin. Published in Evolving Systems, Springer (WoS, Scopus, Q2), March 2021. [Paper]
- Computer Vision-Based Algorithms on Zebra Crossing Navigation. Sumaita Binte Shorif, Sadia Afrin, Anup Majumder, Mohammad Shorif Uddin. Published in the Proceedings of International Joint Conference on Advances in Computational Intelligence (IJCACI 2021), 23-24 October 2021, New Delhi, India. Algorithms for Intelligent Systems, Springer, pp. 319-328. [Paper]
- Medicinal Plant Recognition from Leaf Images Using Deep Learning. Md. Ariful Hassan, Md. Sydul Islam, Md. Mehedi Hasan, Sumaita Binte Shorif, Md. Tarek Habib, Mohammad Shorif Uddin. Published in Computer Vision and Machine Learning in Agriculture, Volume 2, Springer, pp. 137-154, 2022. [Paper]
- Role-Framework of Artificial Intelligence in Combating the COVID-19 Pandemic. Mohammad Shorif Uddin, Sumaita Binte Shorif, Aditi Sarker. Published in Vision, Sensing and Analytics: Integrative Approaches, **Springer**, pp. 357-370, 2021. [Paper]
- Robots and Drones in Applications A Survey. Rabeya Basri, Fahmida Islam, Sumaita Binte Shorif, Mohammad Shorif Uddin. Published in Computer Vision and Machine Learning in Agriculture, Springer, pp. 9-30, 2021. [Paper]
- Machine Vision-Based Fruit and Vegetable Disease Recognition: A Review. Md Tarek Habib, Md Ariful Islam Arif, Sumaita Binte Shorif, Mohammad Shorif Uddin, Farruk Ahmed. Published in Computer Vision and Machine Learning in Agriculture, **Springer**, pp. 143-157, 2021. [Paper]
- Deep Learning-Based Essential Paddy Pests' Filtration Technique for Economic Damage Management. Md Zahid Hasan, Nahid Zeba, Sumaita Binte Shorif, Morium Akter. Published in Computer Vision and Machine Learning in Agriculture, Springer, pp. 51-65, 2021. [Paper]

• Vehicle Detection and Its Speed Measurement. Morium Akter, Jannatul Ferdous, Mahmuda Najnin Eva, Sumaita Binte Shorif, Sk. Fahmida Islam and M. Shorif Uddin. Published in the Proceedings of of International Conference on Advances in Energy Management (ICAEM 2019), 20-21 December 2019, Jodhpur, India, Algorithms for Intelligent Systems, Springer. [Paper]

SELECTED PROJECTS

RecycloBD: One man's trash is another man's treasure 🗹 | Android Studio: Java Oct 2020

• A mobile app that facilitates turning trash into treasure. The aim of this app is to ensure proper waste recycling and management on both personal and industrial level.

Recovid: Let's Recover from Covid-19 🗷 | Android Studio: Java

July 2020

- Developed a **dynamic** peer to peer data sharing platform that aims at making personal and community life easier not just for patients but also doctors, volunteers and connecting people who recovered from Covid-19.
- Focuses on community engagement upon helping the community create an easier way of ensuring health, communication, food subscription as well safe blood and plasma donation.

Exam Bill Management System 🗷 | Python, Django, Bootstrap

Sept 2022

• Developed a web app which enables the faculty and educators of Jahangirnagar University to keep an organized track of all invoice related activities taking place within exam committees and keep a tab on the overall expenses.

TECHNICAL SKILLS

Competitive Programmer in C/C++

Digital Artist, Proficient at creating vector logos and graphic design

Languages: Python, C, C++, Java, SQL, Javascript, HTML, CSS, MATLAB, Prolog

Machine Learning: PyTorch, Keras, Tensorflow, OpenCV

Developer Tools: VS Code, Android Studio, LATEX, PyCharm, Django, Weka

Illustration Tools: Proficient in Adobe Illustrator, Adobe Fresco

SELECTED CO-CURRICULAR AND VOLUNTEERING ACTIVITIES

- Created hundreds of digital artwork and logo designs
- Bangladesh National Television(BTV) Parliamentary English Debate Speaker, TV program no. 3412/7, 28 Sept 2016.
- Medium Article published in 2020- "Is Art Generated by Artificial Intelligence Really Art?"
- Alpha Ambassador at Microsoft Student Learn Ambassadors. April 2021 July 2022
- Campus Ambassador, Bangladesh 2021 at Youth Opportunities. Jan 2021 Dec 2021
- IEEE Student Member Bangladesh Section, Member Number #96794082
- Bangladesh Ambassador for Microfest++ organized by Microsoft Student Partners Pakistan held on 29-31 May 2020. Ambassador code: MS-1154
- Management Team Member and Medium subgroup lead at Voice of Code by Microsoft Student Partners. May 2020- June 2021
- Creative Development Secretary, Jahangirnagar University Computer Club: Directed event operations, media engagements of the organization.
- Former Writer at Writers Club at Voice of Code by Microsoft Student Partners
- Participant, Workshop on Debate and Presentation by JUDO (Jahangirnagar University Debate Organization). 6 March 2019

SELECTED CERTIFICATIONS

Introduction to Cybersecurity by Cisco

Basic Elements of Design: Design Principles and Software Overview- Coursera

Networking Academy Learn-A-Thon 2020 by Cisco