

SUMAITA BINTE SHORIF

Dhaka, Bangladesh

✉ sumaita.bs@gmail.com  [sumaita-binte-shorif](#)  [SumaitaB](#)  [Sumaita-Binte-Shorif](#)  [SumaitaB](#)

RESEARCH INTEREST

Computer Vision, Image Processing, Deep Learning, Machine Learning, Digital Health, Artificial Intelligence, 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

Oct 28, 2023

SELECTED PUBLICATIONS

1. Image Watermarking Using Discrete Wavelet Transform and Singular Value Decomposition for Enhanced Imperceptibility and Robustness. Mahbuba Begum, **Sumaita Binte Shorif**, Mohammad Shorif Uddin, Jannatul Ferdush, Tony Jan, Alistair Barros and Md Whaiduzzaman. Published in **Algorithms**, MDPI, January 12, 2024. [\[Paper\]](#)
2. 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. [\[Paper\]](#)
3. 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. [\[Paper\]](#)
4. Notes on edge detection approaches. Kanija Muntarina, **Sumaita Binte Shorif**, Mohammad Shorif Uddin. Published in **Evolving Systems**, Springer(WoS, Scopus, Q2), March 2021. [\[Paper\]](#)
5. 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. [\[Paper\]](#)
6. 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. [\[Paper\]](#)
7. 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. [\[Paper\]](#)
8. 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. [\[Paper\]](#)
9. 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. [\[Paper\]](#)
10. 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. [\[Paper\]](#)

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 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.

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.

SELECTED AWARDS AND ACHIEVEMENTS

- **1st Runner Up**, Power Up Inter-University Online Business Plan Competition 2020 organized by Varendra University, Bangladesh - Jan, 2021.
- **Shortlisted Participant**, made it to the top 100 teams out of 3700+ teams from all over the country in **ideaTHON Contest 2020** organized by Startup Bangladesh — Innovation, Design Entrepreneurship Academy (iDEA) — Bangladesh Computer Council — ICT Division -Nov, 2020
- **Jahangirnagar University Merit Scholarship:** Awarded **scholarships** for academic excellence from among 420 students from session 2019 to present.
- **Champion**, BdOSN Dev Mania 2020, **Hackathon** Organized by: BdOSN (Bangladesh Open Source Network), October 04 2020 -Oct, 2020
- **Honourable Mention**, PrivaShe Hacks'20, Hackathon Organized by: PrivaC -July, 2020
- Participated in **100+** Prestigious Competitive Programming Contests and obtaining good ranks (both onsite and online) including **IEEE Xtreme 14.0**, **ICPC Dhaka Regional Preliminary Contest 2020** and so on.

SELECTED CO-CURRICULAR AND VOLUNTEERING ACTIVITIES

- Created hundreds of **digital artwork and logo designs** [↗](#)
- **Creative Development Secretary**, Jahangirnagar University Computer Club: Directed event operations, media engagements of the organization.
- **Alpha Ambassador** at Microsoft Student Learn Ambassadors. April 2021 - July 2022
- **Campus Ambassador**, Bangladesh 2021 at Youth Opportunities. Jan 2021 - Dec 2021
- **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?"** [↗](#)
- **IEEE Student Member Bangladesh Section**, Member Number #96794082

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 [↗](#)