

BIDITA SARKAR DIBA

Lecturer, CSE
University of Asia Pacific (UAP)

📍 RH Home Centre, 74/B/1, Green Road, Farmgate, Dhaka

✉️ bidadiba@gmail.com

☎️ +88017-73117526

🌐 [linkedin.com/in/bidita-sarkar-diba](https://www.linkedin.com/in/bidita-sarkar-diba)



ABOUT ME

Lecturer in Computer Science and Engineering with 2+ years of experience in teaching undergraduate students, research supervision and academic mentoring. Expertise in Generative AI, LLMs, Federated Learning, Machine Learning, Deep Learning, Natural Language Processing and Computer Vision with a strong focus on research and innovation. Strong skills in research design, academic writing, student supervision, problem-solving and course coordination. Awarded the prestigious Chancellor's Gold Medal (Fall 2023). Experienced in publishing multiple Q1 journal articles in reputed journals such as Engineering Applications of Artificial Intelligence, Computers and Electrical Engineering, and IEEE Access, along with contributing book chapters for Elsevier.

PROFESSIONAL EXPERIENCES

Lecturer

Jan 2025 - Present

University of Asia Pacific

Key Responsibilities:

- Deliver lectures, develop course materials, and assess student performance.
- Supervise student projects and provide academic guidance and mentoring.
- Conduct research in areas of expertise and publish findings in high-impact journals.
- Participate in curriculum development and departmental activities while staying updated in the field.

Teaching Assistant

Jul 2024 - Dec 2024

University of Asia Pacific

Key Responsibilities:

- Support lead teachers in delivering lessons and classroom activities.
- Assist in grading assignments, tests, quizzes and provide constructive feedback to students.
- Maintain accurate records of student performance and progress.
- Prepare instructional materials and resources to enhance learning.
- Conduct small group or one-on-one tutoring sessions to reinforce course concepts.

Research Intern

Jan 2024 - May 2024

Advanced Machine Intelligence Research Lab (AMIRL)

Key Responsibilities:

- Conduct research in advanced machine intelligence and deep learning.
- Collaborate with researchers on ongoing projects and experiments.
- Participate in lab meetings, discussions, and workshops to enhance research skills.
- Contribute to the preparation of research papers, reports, and presentations.

ACADEMIC BACKGROUND

- **Master of Science (M.Sc.) in Computer Science & Engineering** 2024 - 2025
University of Asia Pacific (UAP), Dhaka
CGPA: 3.98/4.00
- **Bachelor of Science (B.Sc.) in Computer Science & Engineering** 2020 - 2024
University of Asia Pacific (UAP), Dhaka
CGPA: 3.99/4.00, **First Class First, Chancellor's Gold Medal (Fall 2023)**
- **Higher Secondary Certificate (Science)** 2018 - 2019
Sreemangal Government College, Sylhet
GPA: 5.00/5.00
- **Secondary School Certificate (Science)** 2016 - 2017
The Buds Residential Model School and College, Sylhet
GPA: 5.00/5.00

RESEARCH & PUBLICATIONS

JOURNAL PAPERS

1. **Bidita Sarkar Diba**, Jayonto Dutta Plabon, M.D. Mahmudur Rahman, Durjoy Mistry, Alope Kumar Saha, M.F. Mridha, **"Explainable Federated Learning for Privacy-Preserving Bangla Sign Language Detection"**, Engineering Applications of Artificial Intelligence, Volume 134, August 2024, ISSN 09521976, **(Scopus: Q1), (Impact Factor: 8)** DOI: <https://doi.org/10.1016/j.engappai.2024.108657>
2. Durjoy Mistry, Jayonto Dutta Plabon, **Bidita Sarkar Diba**, Saddam Mukta, and M. F. Mridha, **"Federated Learning-Based Architecture for Personalized Next Emoji Prediction for Social Media Comments"**, IEEE Access (2024), **(Scopus: Q1), (Impact Factor: 3.6)** DOI: <https://doi.org/10.1109/ACCESS.2024.3448470>
3. **Bidita Sarkar Diba**, Jayonto Dutta Plabon, Tasnim Jahin Mowla, Nazneen Nahar, Durjoy Mistry, Sourav Sarker, M. F. Mridha, and Jungpil Shin, **"Open problems and challenges in federated learning for IoT: A comprehensive review and strategic guide"**, Computers and Electrical Engineering 126 (2025): 110515, **(Scopus: Q1), (Impact Factor: 4.9)** DOI: <https://doi.org/10.1016/j.compeleceng.2025.110515>
4. **Bidita Sarkar Diba**, Jayonto Dutta Plabon, Nishat Tasnim, Mehjabin Hossain, Durjoy Mistry, Sourav Sarker, M. F. Mridha, Yuichi Okuyama, and Jungpil Shin, **"From Centralization to Decentralization: Blockchain's Role in Transforming Social Media Platforms"** in IEEE Access, Vol-13, Page(s): 80478 - 80507, Date of Publication: 16 April 2025, **(Scopus: Q1), (Impact Factor: 3.6)** DOI: <https://doi.org/10.1109/ACCESS.2025.3561663>
5. Durjoy Mistry, Mehjabin Hossain, **Bidita Sarkar Diba**, Jayonto Dutta Plabon, MD Atik Shams, MD Tawfiqur Rahman, ASM Bakibillah, **"A Multisectoral Study of Mpox Epidemiology, Resistance Surveillance, and Policy Gaps: Toward a One Health Framework"**, Clinical Reviews in Allergy & Immunology 68, no. 1 (2025): 108, **(Scopus: Q1), (Impact Factor: 11.8)** DOI: <https://link.springer.com/article/10.1007/s12016-025-09121-7>

RESEARCH & PUBLICATIONS

BOOK CHAPTERS

1. **Bidita Sarkar Diba**, Md Arafat Kabir, Tasnim Jahin Mowla, Hanif Bhuiyan, Durjoy Mistry, “**Secure Collaborative Learning for CSV-Based Ovarian Cancer Diagnosis: A Federated Approach**”, In: Mridha, M.F., Dey, N. (eds) Federated Learning in Health Care Technology. Studies in Computational Intelligence, 2026, vol 1216. Springer, Singapore, (**Scopus: Q4**), (**Impact Factor: 1.7**) DOI: https://doi.org/10.1007/978-981-96-8353-6_7
2. **Bidita Sarkar Diba**, Nishat Tasnim, Mehjabin Hossain, Alope Kumar Saha, Md Golam Kibriya, Moshur, Rahman Tonmoy (2026), “**Enhancing Gall Bladder Cancer Detection by Privacy-Preserving Federated Learning: A Comprehensive CSV-Based Classification Approach**”, In: Mridha, M.F., Dey, N. (eds) Federated Learning in Health Care Technology. Studies in Computational Intelligence, vol 1216. Springer, Singapore, (**Scopus: Q4**), (**Impact Factor: 1.7**) DOI: https://doi.org/10.1007/978-981-96-8353-6_9
3. **Bidita Sarkar Diba**, Tasnim Jahin Mowla, Nazneen Nahar, Fahad Ahmed, Durjoy Mistry (2026) “**Privacy-Preserving Rheumatism Detection Using Federated Learning**”, In: Mridha, M.F., Dey, N. (eds) Federated Learning in Health Care Technology. Studies in Computational Intelligence, vol 1216. Springer, Singapore. (**Scopus: Q4**), (**Impact Factor: 1.7**) DOI: https://doi.org/10.1007/978-981-96-8353-6_8

CONFERENCE PAPER

1. Durjoy Mistry, **Bidita Sarkar Diba**, Jayonto Dutta Plabon, Salah Uddin Ahmed, and M. F. Mridha, “**Personalized Pomodoro Productivity Tracking with Privacy-Preserving Machine Learning in Human-Computer Interaction**”, In International Conference on Human-Computer Interaction, pp. 416-427. Cham: Springer Nature Switzerland, 2025. DOI: https://link.springer.com/chapter/10.1007/978-3-031-93965-5_29

RESEARCH - CODING SKILLS

Programming:

- Python
- TensorFlow
- PyTorch
- Pandas
- Java
- C/C++
- JavaScript
- HTML/CSS
- Django(Web)

Machine Learning:

- Deep Learning
- Federated Learning
- Computer Vision
- NLP
- Generative AI

Interpersonal Skills:

- Formal Documentation Writing
- Idea Formulation
- Data Analysis
- Presentation Skill
- Writing & Verbal Communication
- Teamwork & Leadership
- Public Relations Skill
- Critical Thinking

AWARDS & ACHIEVEMENTS

ACADEMIC

- Chancellor’s Gold Medal – Fall 2023
- Vice Chancellor’s Honor Award – Fall 2023
- Vice Chancellor’s Honor Award – Spring 2023
- Vice Chancellor’s Honor Award – Fall 2022

AWARDS & ACHIEVEMENTS

ACADEMIC

- Vice Chancellor's Honor Award - Spring 2022
- Vice Chancellor's Honor Award - Fall 2021
- Vice Chancellor's Honor Award - Spring 2021
- Vice Chancellor's Honor Award - Fall 2020
- Vice Chancellor's Honor Award - Spring 2020

OTHERS

- Champion in UAP Intra University Programming Contest Junior - 2022
- Champion in CSE Cultural Fest Art Competition - 2024
- Champion in UAP Intra University Hackathon - 2022
- Champion in CSE Cultural Fest Art Competition - 2022
- Champion in Software & Hardware Quiz Contest - 2021
- Best Girls Team in UAP Inter-University Collaborative Contest - 2024
- 1st Runner-Up of Idea Competition in CSE Tech Carnival - 2024
- 1st Runner-Up of Robo Quiz in CSE Robo-Expo 1.0 - 2023

CERTIFICATION

Introduction to Machine Learning - 2024 (UAP)

Course Details :

- Completed a 30-day course covering fundamental machine-learning concepts and algorithms.
- Gained hands-on experience with supervised and unsupervised learning, model evaluation and practical applications.
- Worked on projects to apply machine learning techniques.

HTML5, CSS3 & Bootstrap4 for Web Development - 2021 (Bohubrihi)

Course Details :

- Completed a 15-20 hour self-paced course on front-end web development.
- Gained proficiency in HTML5, CSS3 (including Flexbox & Grid) and Bootstrap 4 for building responsive websites.
- Hands-on experience through project-based learning.

International English Language Testing System (IELTS) – 2020 (Saifur's)

Course Details :

- Completed a 3-month comprehensive IELTS preparation course.
- Focused on improving proficiency in Listening, Reading, Writing, and Speaking skills.
- Gained strategies for achieving a high band score through practice tests and personalized feedback.

LANGUAGE PROFICIENCY

- **Bangla:** Native or bilingual proficiency
- **English:** Professional working proficiency

REFERENCES

[1]

Thesis Supervisor & Advisor

Prof. Dr. Alope Kumar Saha

Professor & Proctor,
Department of Computer Science & Engineering
University of Asia Pacific
Email: aloke@uap-bd.edu

[2]

Research Mentor

Prof. Dr. Firoz Mridha

Professor & Head,
Department of Computer Science & Engineering
American International University (AIUB)
Email: firoz.mridha@aiub.edu

*RANKED IN WORLD'S TOP 2% SCIENTISTS,
9000+ CITATIONS.*

DECLARATION

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications and my experiences. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Bidita Sarkar Diba