

BADHAN CHANDRA DAS

Website: <https://solidlab.network/people>

EDUCATION

Ph.D. in Computer Science

Aug. 2022 - Present

Knight Foundation School of Computing and Information Science

Sustainability, Optimization, and Learning for InterDependent networks laboratory (**solid lab**)

College of Engineering and Computing, Florida International University

Ph.D. Co-Advisors: **Dr. M. Hadi Amini** and **Dr. Yanzhao Wu**

Ph.D. Topic: Privacy-Preserving Machine Learning: Theory and Applications

Master of Science in Computer Science and Engineering

2018 - 2019

Jahangirnagar University, Dhaka, Bangladesh.

Bachelor of Science in Computer Science and Engineering

2014 - 2018

Jahangirnagar University, Dhaka, Bangladesh.

HONORS AND RECOGNITION

1. Awarded **Graduate Assistantship** from Florida International University.
2. Awarded **Best Paper Award** at International Conference on Machine Intelligence and Data Science Applications-2021.
3. Awarded **Developing Country Researcher Award** at 7th IEEE Asia-Pacific Conference on Computer Science and Data Engineering-2020, Australia.
4. Awarded Special Research Grant from University Grants Commissions of Bangladesh.
5. Awarded Yearly Scholarship Based on Academic Result in whole Undergraduate Period.

HIGHLIGHTS

- Profound knowledge on the state-of-the-art **Computer Science**, **Machine Learning**, and **Deep Learning** concepts.
- Working on design and analysis of experiments to investigate privacy-preserving machine learning models in various domains.

RESEARCH INTERESTS

- Privacy Preserving Machine Learning and its Applications.
- Deep Learning, Convolutional Neural Network, Federated Learning, Computer Vision, Optimization.

SELECTED PROJECTS (DURING PHD)

Privacy Preserving Machine Learning for Medical Images: Analyzing the vulnerabilities in terms of Privacy of Machine Learning and Federated Learning environments, mitigation techniques e.g., Differential Privacy, and its applications in real-world applications, e.g., medical images.

TECHNICAL STRENGTHS

Programming language	Python, C, C++, Java
Web-based skills	JavaScript, bootstrap, CSS, HTML
Database Management Systems	Oracle, Microsoft SQL Server, MySQL
Development tool	PyCharm, Anaconda, Microsoft Visual Studio, working with a Remote GPU server.
Other Softwares	LATEX, MATLAB, MS Office

WORK EXPERIENCE

Sustainability, Optimization, and Learning for InterDependent networks laboratory [solid lab] August 2022 - Present
Graduate Assistant

- Leading the Privacy Preserving Machine Learning project.
- Present research works in different conferences and seminars.

Bangladesh University of Business and Technology (BUBT) 2020-2022
Full-time Lecturer, Department of Computer Science and Engineering

- Area of Teaching: Data Mining, Machine Learning, Database.
- Area of Research: Data Mining, Deep Learning.
- Working with the course curriculum.

University of Development Alternative (UODA) 2019-2020
Part-time Lecturer, Department of Computer Science and Engineering.

- Area of Teaching: Web Engineering, Database.

SELECTED PUBLICATIONS (DURING PHD AT FIU)

1. **Badhan Chandra Das**, M. Hadi Amini, and Yanzhao Wu. “Privacy Risks Analysis and Mitigation in Federated Learning for Medical Images” in International Conference on Bioinformatics and Biomedicine (2023), Acceptance Rate: 19.7%.

PROFESSIONAL ACTIVITIES (DURING PHD AT FIU)

Machine Learning Researcher: Working as the machine learning researcher at solid lab to design and analyze the vulnerabilities in terms of Privacy of Machine Learning and Federated Learning environments, mitigation techniques, and their applications.