Durjoy Mistry ⌕

▸Researcher ▸Teacher ▸Youtuber

A passionate and driven researcher, expert in machine learning, deep learning, **federated learning**, NLP, **generative AI**, and **quantum machine learning**, with strong coding skills in Python, and other tools, eager to leverage my passion for innovation to deliver meaningful value to the world of computer science.

Short Version ⌕

📞 +8801719 588 272	✉ durjoy@uap-bd.edu	🎓 scholar/**Durjoy Mistry**↗	</> github.com/**heydurjoy**↗

`Research Nerd` `Cited by: 165+` `Q1: 9+` `Love to code` `ML/DL Expert` `Fun to work with ☺`

💼 Work experience ⌕

July 2023 - Present
Dhaka, Bangladesh

Lecturer, Department of CSE ⌕
▷ University of Asia Pacific
- Teaching advanced courses including Machine Learning and AI
- Supervised numerous students' first research publications. ⌕
- Leading the AI Research Lab initiatives
- **Convenner: Software and Hardware Club, Dept. of CSE**
- Courses Conducted:
  - CSE 102: Introduction to Computer Programming Lab
  - CSE 104: Structured Programming Lab
  - CSE 108: Competitive Programming Lab
  - CSE 304: Data Communication Lab
  - CSE 306: System Analysis & Design Lab
  - CSE 302: Object Oriented Programming II Lab: Visual and Web Design
  - CSE 301: Object Oriented Programming II: Visual and Web Design

Jan 2022 - Present
Dhaka, Bangladesh

Lead Researcher, Department of Data Science and Federated Learning ⌕
▷ AMIR LAB
- Lead research in Federated Learning, and Generative AI
- Supervising junior researchers and guiding publications
- Collaborating on international projects and grants

Jan 2021 - 2022
Dhaka, Bangladesh

Full-stack Web Developer
▷ dotRedDigital
- Full-stack web development

🎓 Education ⌕

˙✦ **Master of Science**
2025

Master in Computer Science and Engineering
▷ University of Asia Pacific
- **CGPA: 4.00 (Out of 4.00) | Batch Rank #01**

- Thesis: "Secure Federated Learning for Sign Language Detection: Addressing Model Inversion Vulnerabilities with Differential Privacy"

·✦ Bachelor of Science
2021

B.Sc. in Computer Science and Engineering
▷ University of Asia Pacific
- **CGPA: 3.88 (Out of 4.00) | Batch Rank #02**
- Thesis: "Hate Speech Detection in Social Media Comments using BERT"

·✦ SSC/HSC
2013-2015

Science
▷Barisal Education Board
- SSC , 2013 — GPA 5.00 (Out of 5.00)
- HSC, 2015 — GPA 5.00 (Out of 5.00)

✪ Research – Coding Skills ⬈

Writing	Vision	NLP	GenAi	Data Analysis	Idea ormulation

Illustrations	Time Management	Python and Libraries	Team Collaboration

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

Machine Learning
- Deep Learning
- Federated Learning
- Computer Vision
- NLP
- Quantum Machine Learning
- Generative AI
- Blockchain
- Bioinformatics

Useful Extras
- Graphic Design
- Video Editing
- Video Hosting
- Presenter
- Youtuber
- Fast-paced

✪ Awards/Certifications ⬈

Vice Chancellor's Award (GPA: 3.90+)
- Fall 2018, University of Asia Pacific
- Fall 2019, University of Asia Pacific
- Spring 2020, University of Asia Pacific
- Fall 2020, University of Asia Pacific
- Spring 2021, University of Asia Pacific
- 2021, University of Asia Pacific

Dean's Award (GPA: 3.75+)
- Fall 2017, University of Asia Pacific
- Spring 2019, University of Asia Pacific

Contest Winner
- 2020 – Inside CSE, Film And Photography Club, UAP (Watch ▶)

Other Recognitions

- Secured Bronze Award – International Blockchain Olympiad, for project Trusted Traceability Service
- Emerging Leader 2024 Award.

✪ Organisational / Communication skills ⎆

`Always on time` `Team Man` `Attention to detail` `Perseverance` `Negotiator` `Agile`

✪ IELTS (2025) | Overall: 7.0 ⎆

`Listening: 7.0` `Reading: 6.5` `Writing: 6.5` `Speaking: 7.5` `CEFR Level:  1`

🖼 Research and Publications Highlights ⎆ | Cited by: 161+ | Q1: 9+ | Total: 17+

Total Publication: 17
Total Q1: 9
Total First Author or Equal Contribution: 7

SL	Year	Published at	Contribution	Research Article	DL
1	2023	**Q1 Journal**	**First Author**	Mistry, D., Mridha, M. F., Safran, M., Alfarhood, S., Saha, A. K., & Che, D. (2023). Privacy-preserving on-screen activity tracking and classification in e-learning using federated learning. IEEE Access, 11, 79315-79329.	**Link**
2	2023	**Q1 Journal**	**First Author**	Mistry D, Hossain M, Diba BS, Plabon JD, Shams MA, Rahman MT, et al. A multisectoral study of Mpox epidemiology, resistance surveillance, and policy gaps: toward a One Health framework. Clin Rev Allergy Immunol. 2026;68(1):108.	**Scholar**
3	2024	**Q1 Journal**	**Corr. Author**	Diba, B. S., Plabon, J. D., Rahman, M. M., Mistry, D., Saha, A. K., & Mridha, M. F. (2024). Explainable federated learning for privacy-preserving bangla sign language detection. Engineering Applications of Artificial Intelligence, 134, 108657.	**Link**
4	2024	**Q1 Journal**	**First Author**	Mistry, D., Plabon, J. D., Diba, B. S., Mukta, S., & Mridha, M. F. (2024). Federated learning-based architecture for personalized next emoji prediction for social media comments. IEEE Access.	**Link**
5	2025	**Q1 Journal**	**Eq. First**	Diba, B. S., Plabon, J. D., Mowla, T. J., Nahar, N., Mistry, D., Sarker, S., … & Shin, J. (2025). Open problems and challenges in federated learning for IoT: A comprehensive review and strategic guide. Computers and Electrical Engineering, 126, 110515.	**Link**
6	2025	**Q1 Journal**	**Author**	Islam, M. S., Islam, M. R., & Mistry, D. (2025). Deep learning for predicting essential proteins using topological features and gene ontology. Neural Computing and Applications, 1-16.	**Link**

7	2025	**Q1 Journal**	**Eq. First**	Diba, B. S., Plabon, J. D., Tasnim, N., Hossain, M., Mistry, D., Sarker, S., ... & Shin, J. (2025). From Centralization to Decentralization: Blockchain's Role in Transforming Social Media Platforms. IEEE Access.	**Link**
8	2025	**Q1 Journal**	**Author**	Rahman, N. N., Mahi, A. B. S., Mistry, D., Al Masud, S. M. R., Saha, A. K., Rahman, R., & Islam, M. R. (2025). FallVision: A benchmark video dataset for fall detection. Data in Brief, 59, 111440.	**Link**
9	2026	**Q1 Journal**	**Author**	Aurnob AR, Tanim SA, Shrestha TE, Mridha MF, Mistry D. FedFusionNet: Advancing oral cancer recurrence prediction through federated fusion modeling. Inf Fusion. 2026;132:104205. doi:10.1016/j.inffus.2026.104205	**Link**
10	2025	**Prestigious Conference**	**First Author**	Mistry, D., Diba, B. S., Dutta Plabon, J., Ahmed, S. U., & Mridha, M. F. (2025, June). 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.	**Scholar**
11	2023	**Conference**	**First Author**	Mistry, D., Tonmoy, M. R., Anower, M. S., & Hasan, A. T. (2023, September). Federated Transfer Learning for Vision-Based Fall Detection. In International Conference on Big Data, IoT and Machine Learning (pp. 961-975). Singapore: Springer Nature Singapore.	**Scholar**
12	2024	**Book Chapter**	**Corr. Author**	Hossain Shovon, M. S., Sultana, Z., Shin, J., Hamid, M. A., & Mistry, D. (2024). Incorporating residual connections into a multi-channel CNN for lung cancer detection in digital pathology. In Data-Driven Clinical Decision-Making Using Deep Learning in Imaging (pp. 189-205). Singapore: Springer Nature Singapore.	**Scholar**
13	2024	**Book Chapter**	**Corr. Author**	Tabassum, A., Hassan Ovi, S., Hossain, S., Tonmoy, M. R., Shovon, M. S. H., Hussein, M. R., & Mistry, D. (2024). Privacy Preserving Breast Cancer Prediction with Mammography Images Using Federated Learning. In Data-Driven Clinical Decision-Making Using Deep Learning in Imaging (pp. 227-245). Singapore: Springer Nature Singapore.	**Scholar**
14	2024	**Book Chapter**	**Author**	Kibriya, M. G., Mistry, D., Mistry, D., Tonmoy, M. R., Ovi, S. H., Tabassum, A., & Hossain, S. (2024). Privacy-Preserving Vision-Based Detection of Pox Diseases Using Federated Learning. In Data-Driven Clinical Decision-Making Using Deep Learning in Imaging (pp. 105-122). Singapore: Springer Nature Singapore.	**Scholar**
15	2025	**Book Chapter**	**Corr. Author**	Plabon JD, Hossain M, Kabir MA, Mistry D, Hamid MA. Federated learning strategies for confidential leukemia detection from medical images. In: Federated Learning in Health Care Technology. 2025:97-116.	**Link**

| 16 | 2025 | **Book Chapter** | **Corr. Author** | Diba BS, Mowla TJ, Nahar N, Ahmed F, Mistry D. Privacy-preserving rheumatism detection using federated learning. In: Federated Learning in Health Care Technology. 2025:139-168. | **Link** |
| 17 | 2025 | **Book Chapter** | **Corr. Author** | Diba BS, Kabir MA, Mowla TJ, Bhuiyan H, Mistry D. Secure collaborative learning for CSV-based ovarian cancer diagnosis: a federated approach. | **Link** |

🌐 References ⬈

[1]
Thesis Supervisor

Prof. Dr. Aloke Kumar Saha ⬈
Professor, Department of CSE
University of Asia Pacific.
Email: aloke@uap-bd.edu

[2]
Research Mentor

Prof. Dr. Firoz Mridha ⬈
Professor, Department of CSE
American International University - Bangladesh (AIUB)
Email: firoz.mridha@aiub.edu
Ranked in World's Top 2% Scientists, 6500+ Citations