



## Dipanjali Kundu

Computer Science & Engineering

### Bio

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Dipanjali Kundu is a Lecturer in Department of Computer Science and Engineering at the National Institute of Textile Engineering and Research.

Dipanjali Kundu completed her Bachelors program in Computer Science and Engineering from Chittagong University of Engineering and Technology (CUET), Chittagong, Bangladesh in 2019 and pursuing M.Sc. from the Military Institute of Science and Technology (MIST). Currently, she is working as a Lecturer at Computer Science and Engineering, National Institute of Textile Engineering and Research (NITER), Constituent Institute of the University of Dhaka, Savar, Dhaka, Bangladesh since January 2020 to the present. The main interests of her research are Internet of Things (IoT), Machine Learning, AI, Blockchain, Data security and Data Science.

## Education

Degree Name	Group/Major Subject	Board/Institute	Country	Passing Year
M.Sc.	Computer Science and Engineering	MIST	Bangladesh	Ongoing
B.Sc	Computer Science and Engineering	CUET	Bangladesh	2018

## Experience

Job Title	Organization	Location	From Date	To Date
Lecturer	National Institute of Textile Engineering and Research	Nayarhat, Savar	01/01/2020	Till Date
Lecturer	City University	Ashulia	01/05/2019	31/12/2020
Programmer	Kazi Farms(Sysnova)	Dhanmondi, Dhaka	01/01/2019	29/04/2019

## Research Activities

### Research Interest

Subject	Description	Research Interest (Goal/ Target Indicator)
Computer Science and Engineering	Impact of machine learning and Federated learning in the healthcare field, Security of healthcare data	

## Publications

### Journal Article

SL. No-	Article Name	Link
01	DistB-SDoIndustry: Enhancing Security in Industry 4.0 Services based on Distributed Blockchain through SDN-IoT Enabled Architecture	<a href="https://arxiv.org/abs/2012.10011">https://arxiv.org/abs/2012.10011</a>
02.	SGBBA: An Efficient Method for Prediction System in Machine Learning using Imbalance Dataset	<a href="https://thesai.org/Publications/ViewPaper?Volume=12&amp;Issue=3&amp;Code=IJACSA&amp;SerialNo=51">https://thesai.org/Publications/ViewPaper?Volume=12&amp;Issue=3&amp;Code=IJACSA&amp;SerialNo=51</a>
03.	SDN-IoT empowered intelligent framework for industry 4.0 applications during COVID-19 pandemic	<a href="https://link.springer.com/article/10.1007/s10586-021-03367-4">https://link.springer.com/article/10.1007/s10586-021-03367-4</a>
04.	Study on IoT for SARS-CoV-2 with healthcare: present and future perspective	<a href="http://www.aimspress.com/article/doi/10.3934/mbe.2021475">http://www.aimspress.com/article/doi/10.3934/mbe.2021475</a>
05	Hospital patients' length of stay prediction: A federated learning approach	<a href="https://www.sciencedirect.com/science/article/pii/S1319157822002336?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S1319157822002336?via%3Dihub</a>
06	SDN-IoT empowered intelligent framework for industry 4.0 applications during COVID-19 pandemic	<a href="https://link.springer.com/article/10.1007/s10586-021-03367-4">https://link.springer.com/article/10.1007/s10586-021-03367-4</a>
07	Federated learning-based AI approaches in smart healthcare: concepts, taxonomies, challenges and open issues	<a href="https://link.springer.com/article/10.1007/s10586-022-03658-4">https://link.springer.com/article/10.1007/s10586-022-03658-4</a>
08	On the Integration of Blockchain and SDN: Overview, Applications, and Future Perspectives	<a href="https://link.springer.com/article/10.1007/s10922-022-09682-4">https://link.springer.com/article/10.1007/s10922-022-09682-4</a>
09	On the ICN-IoT with federated learning integration of communication: Concepts, security-privacy issues, applications, and future perspectives	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0167739X22002667?via%3Dihub">https://www.sciencedirect.com/science/article/abs/pii/S0167739X22002667?via%3Dihub</a>
10	Impacts of blockchain in software-defined Internet of Things ecosystem with Network Function Virtualization for smart applications: Present perspectives and future directions	<a href="https://onlinelibrary.wiley.com/doi/10.1002/dac.5429">https://onlinelibrary.wiley.com/doi/10.1002/dac.5429</a>

### Conference Proceedings

SL. No-	Paper Name	Link
01	An Intelligent Vaccine Distribution Process in COVID-19 Pandemic through Blockchain-SDN Framework from Bangladesh Perspective	<a href="https://ieeexplore.ieee.org/document/9641303">https://ieeexplore.ieee.org/document/9641303</a>

## Contact

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### Academic

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### Institute – Faculty

Name of the Department: Computer Science and Engineering

Position: Lecturer