CURRICULUM VITAE

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PROFESSIONAL EXPERIENCE:-

Present Organization:
Assistant Professor- School of Engineering and Technology,
Adamas University, Kolkata **(July 2019– Till Date)**

Past Organization:

Assistant Professor- Department of Electronics & Communication Engineering,
Adamas Institute of Technology, Kolkata **(January 2014–June 2019)**

Teaching Associate - Department of Electronics & Communication Engineering,
Bengal Institute of Technology & Management, Santiniketan
(August 2012– January 2014)

EDUCATIONAL QUALIFICATIONS:-

PhD (Pursuing)	Indian Institute of Engineering Science and Technology (IIEST), Shibpur
M.TECH	Department of Electronics & Communication Engineering, National Institute of Technology, Durgapur, 2013, Specialization in Tele Communication.
B.TECH	West Bengal University of Technology, 2011, Specialization in Electronics & Communication Engineering.
Higher Secondary(10+2)	Bethune Collegiate School, Kolkata, 2007
Secondary(10)	Holy Child Institute, Kolkata, 2005

PUBLICATIONS:-

- ***Robust secure beamforming design in cognitive satellite communication for coexistence with terrestrial networks Physical Communication***, Volume 67, 2024, 102509, https://doi.org/10.1016/j.phycom.2024, ISSN 1874-4907.

- S. Mallick, Tirtha Majumder, P. Chowdhury, and M. R. Alam, Eds., **Revolutionized 6G communication with Holographic MIMO network. in Millimeter Wave, Terahertz Devices for 5G, and 6G systems** (MWTDSCT − 2024), Springer, 2024, Accepted
- ***Multiband Patch Antenna utilizing E, L and U slots for Satellite Communication***, 2nd IEEE International Conference on Futuristic Technologies (INCOFT), Nov, 2023 ISBN: 979-8-3503-0884-6.
- ***Connecting the Unconnected: The Potential of 5G Satellite Convergence in Rural India***, 10th International Conference on Microelectronics, Circuits & Systems, June 2023, ISSN 09467076.
- ***Crop Yield prediction in West Bengal using Machine Learning Algorithms in MATLAB***, 10th International Conference on Microelectronics, Circuits & Systems, June 2023, ISSN 09467076.
- ***Biological Analysis of Mutual Information Based Gene Clusters using Empirical Mode Decomposition***, ICEEC13, June 2013, ISBN: 978-81-923541-0-3.
- ***Clustering analysis of denoised microarray data using Empirical mode decomposition***, IETE, April 2013.
- ***KEGG Analysis of De-noised Mutual Information based Microarray Data using Empirical Mode Decomposition***, IJARCSSE, May 2014, ISSN: 2277 128X.

KEY COURSES UNDERTAKEN:-

Wireless Communication

• Modulation techniques, channel coding, multiple access techniques, wireless network protocols, antenna design and optimization, channel modeling and propagation, wireless security and privacy, cognitive radio and spectrum sensing, wireless sensor networks, and MIMO (Multiple Input Multiple Output) systems.

Digital Electronics

• Boolean algebra, logic gates, combinational circuits, sequential circuits, flip-flops, registers, counters, arithmetic circuits, multiplexers, demultiplexers, digital logic families.

Basic Electronics

• diodes, transistors, amplifiers, operational amplifiers, digital logic gates, semiconductor devices.

Digital signal Processing

• Discrete-time signals and systems, discrete Fourier transform (DFT), fast Fourier transform (FFT), digital filter design, FIR filters, IIR filters, convolution, correlation, spectral analysis.

Machine Learning

• Supervised learning, unsupervised learning, reinforcement learning, classification, regression, clustering, neural networks, deep learning, decision trees, support vector machines.

RESEARCH INTEREST:-

- Satellite and Terrestrial (Beyond 5G) Coexistence
- Machine Learning for Channel Estimation in Satellite Communication
- Beamforming in MIMO Antennas for Interference Management
- Examining how IoT devices interact within satellite and terrestrial frameworks to enable reliable communication, especially in remote or underserved regions.

DATE: - 14.1.2025 ----------

PLACE: - Kolkata Signature of the candidate