

CURRICULAM VITAE

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SHIBABRATA MUKHERJEE

Career Objective: Intend to build a career in a professional environment with commitment and dedication which will enrich my competence and potential.

Academic Qualification:

COURSE	UNIVERSITY/BOARD/ COUNCIL	INSTITUTE	YEAR OF PASSING	MARKS
Ph.D. (Electrical Engineering)	Jadavpur University	Jadavpur University	2024	
M.Tech (Illumination Technology & Design)	Jadavpur University	Jadavpur University	2017	CGPA:8.40
B. Tech (Electrical Engineering)	West Bengal University of Technology	St. Thomas' College of Engineering & Technology	2013	DGPA:7.87
(10+2) Standard	West Bengal Council Of Higher Secondary Education	Howrah Vivekananda Institution	2009	75.50%
10 th Standard	West Bengal Board of Secondary Education	Howrah Vivekananda Institution	2007	73.87%

Professional Experience:

Name of the Post	Employer	Department	Nature of Job	From	To
Research Fellow (D.R.D.O. Sponsored Project-Free space Laser Communication for Data & Voice in different atmospheric conditions)	Jadavpur University	Electrical Engineering	Research	January, 2018	December, 2021
Assistant Professor	Pailan College of Management & Technology	Electrical & Electronics Engineering	Teaching	September, 2023	July, 2025
Ad-Hoc Faculty	Meghnad Saha Institute of Technology	Electrical Engineering	Teaching	August, 2022	September, 2022
Assistant Professor	Swami Vivekananda University	Electrical Engineering	Teaching	August, 2025	Till Date

Paper Publication:

A. Journal

- (i) **S. Mukherjee**, P. Ghosh, P. Satvaya, “Performance assessment and comparison of the MWIR & SWIR FSO transmission link under turbulence and variable visibility situations utilizing several spatial diversity techniques”, Journal of Optics, (Springer Nature), 2026.
- (ii) **S. Mukherjee**, S. Paul, S. Mazumdar, “FSO System Performance Improvement Strategy in Rainy Weather Conditions Utilizing Receiver Diversity Schemes: An Experimental Study” Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, (Springer Nature), 2026.
- (iii) **S. Mukherjee**, S. Wasif, P.Satvaya, “Comparative analysis of aperture averaging & receiver diversity schemes in FSO channel performance under high scintillation regime”, Discover Electronics (Springer Nature), vol. 2, Issue 1, 2025
- (iv) **S. Mukherjee**, B. Bhattacharjee, P.K, Sadhu, “Comparative investigation of visible to SWIR lasers for terrestrial FSO link analysis under various meteorological circumstances”, Facta universitatis-series: Electronics and Energetics, vol. 38, Issue. 2, pp.305-336, 2025.
- (v) **S. Mukherjee**, S. Paul, S. Mazumdar, “Experimental characterization of optical power attenuation of 980 nm FSO link in artificial rain-induced environment & mitigation strategy using aperture averaging technique”, Indian Journal of Physics (Springer Nature), vol. 98, pp. 2933–2945, 2024.
- (vi) **S. Mukherjee**, S. Paul, S. Mazumdar, “Design of an Optical Wireless Communication Link Using Mid Wave Infrared Laser Source and Comparison with Short Wave Infrared Laser Sources in Different Atmospheric Anomalies: An Analytical Study”, Nonlinear Optics Quantum Optics, vol. 60, pp. 85-111, 2024.
- (vii) **S. Mukherjee**, S. Paul, S. Mazumdar, “Effect on Aperture averaging technique on Multiple Input Multiple Output (MIMO) based MWIR & SWIR FSO link in the presence of scintillation and different visibility circumstances” International Journal of Laser Science, vol. 3, pp. 175-185, 2024.

- (viii) **S. Mukherjee**, S. Paul, S. Mazumdar, “Effect of MIMO scheme on MWIR FSO link & comparison with SWIR wavelength in the presence of different visibility and strong turbulence circumstances”, Journal of Optical Communication (De Gruyter), vol. 45, no. s1, pp. s1977-s1983, 2024.
- (ix) **S. Mukherjee**, S. Paul, S. Mazumdar, “BER performance analysis of MWIR & SWIR FSO links utilizing aperture averaging technique considering turbulence and various visibility situations with pointing errors”, Journal of Optical Communication (De Gruyter), vol. 45, no. s1, pp. s2531-s2542, 2024.
- (x) **S. Mukherjee**, S. Paul, S. Mazumdar, “ A cost effective FSO communication link using 808 nm laser and its performance analysis in simulated temperature conditions”, Optical and Quantum Electronics (Springer Nature), vol. 55, pp. 1-15, 2023.
- (xi) **S. Mukherjee**, S. Paul, S. Mazumdar, “Experimental studies of the influence of Scintillation on a fso communication system for visible and infrared wavelengths”, Journal of Russian Laser Research (Springer Nature), vol. 44, pp. 357-364, 2023.
- (xii) **S. Mukherjee**, S. Paul, S. Mazumdar, “Experimental studies and analysis of 1550 nm laser as optical wireless communication link in simulated rainy, foggy and heating conditions according to indian atmosphere”, Light & Engineering, vol. 31, pp.19-33, 2023.
- (xiii) B. Das, **S. Mukherjee**, B. Chattopadhyay, S. Mazumdar, “Design of a 10 GHz optical wireless communication link using low power C-band laser diode”, Results in Optics (Elsevier), vol.5, pp. 1-11, 2021.
- (xiv) **S. Mukherjee**, P. Satvaya, S. Mazumdar, “Development of a microcontroller based Emergency lighting system with smoke detection and mobile communication facilities”, Light & Engineering, vol. 27, pp.46-50, 2019.

B. Conference/Proceedings Publication

- (i) **S. Mukherjee**, S. Paul, S. Mazumdar, “Experimental Studies of FSO Communication Channel Using Visible Wavelengths Coherent Optical Sources in Artificial Rainy Condition”, IEEE Calcutta Conference, CALCON, pp. 98-103, 2022.
- (ii) **S. Mukherjee**, B. Das, S. Mazumdar, “Experimental studies of Laser power attenuation of 532 nm laser at different visibility using simulated foggy conditions”, AIP Conference Proceedings, IEMPOWER, vol. 2640, 2022.
- (iii) B. Das, **S. Mukherjee**, S. Mazumdar, “Bidirectional Audio transmission in optical wireless communication using PWM and class D amplifier”, Nanoelectronics, Circuits and communication system, Lecture notes in Electrical Engineering, Springer Nature Singapore, vol. 692, 2021.
- (iv) B. Das, T. Sharma Sarkar, **S. Mukherjee**, B. Sinha, S. Mazumdar, “Development of full duplex laser based data and voice communication system bridging two IoT networks”, Proceedings of 21st International Conference on Distributed Computing & Networking (ICDCN), 2020.
- (v) T. Sharma Sarkar, B. Sinha, **S. Mukherjee**, I. Joardar, S. Mazumdar, “Development of an FPGA based Indoor FSO communication system using 808 nm Infrared Laser Source”, IEEE Calcutta Conference, CALCON, pp. 313-317, 2020.

Personal Details:

Date of Birth	: 3 rd July, 1991
Gender	: Male
Marital Status	: Single
Nationality	: Indian
Religion	: Hinduism
Languages Known	: Bengali, English and Hindi
Father's Name	: Mr. Somnath Mukherjee
Mother's Name	: Mrs. Lila Mukherjee
Hobby	: Playing Cricket

Place: Howrah

Date: 19/06/2026

