

TRISHA PAUL

CONTACT

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ADDRESS: South Bamkinpally,
Madhyamgram, Kolkata-700129

FAMILY DETAILS

Father: Bhazan Paul

Mother: Rina Paul

PERSONAL DETAILS

DATE OF BIRTH: - 06.12.1997

NATIONALITY: - INDIAN.

BLOOD GROUP: - A+

MARITAL STATUS: - UNMARRIED.

RELIGION: - HINDU.

CASTE: - GENERAL.

GENDER: - FEMALE.

LANGUAGES KNOWN: - BENGALI,

ENGLISH, HINDI

HOBBIES

Recitation

Content Writing

WORK EXPERIENCE

Assistant Professor: ECE Department, Swami Vivekananda University, Kolkata. 1st Sept 2024 – Present.

Research Associate: Institute of Engineering & Management, Kolkata. 10th Oct 2022 – 31st Aug 2024.

PHD RESEARCH AREA

Analysis of multichannel EEG signals to model emotional and cognitive states using signal processing, statistical analysis, and predictive modeling techniques for mental health and human-computer interaction applications. Supervisor Professor Dr. Sheli Sinha Chaudhuri, Electronic and Telecommunication Department, Jadavpur University.

ACADEMIC QUALIFICATION

PhD pursuing in Electronics and Telecommunication Engineering Department, Jadavpur University. Registration Number: 022607004.

M. Tech in Biomedical Instrumentation Engineering, Calcutta University, Kolkata. 2021-2023. CGPA: 8.01

B. Tech in Electronics and Instrumentation Engineering, Narula Institute of Technology, Kolkata. 2017- 2021. DGPA: 8.52

Higher Secondary, Acharjya Prafulla Chandra Girls' High School, W.B.C.H.S. 2017 Percentage: 63.8%

Secondary, Maghyamgram Kabiguru High School, W.B.B.S.E. 2015 Percentage: 82.28%

Achievements

- Project Sanctioned (IDEAWB025168): MSME HACKATHON 4.0, Host Institute (CSIR-CMERI Durgapur). Sanctioned amount (15 Lacs)
- As a Mentor won AICTE Inventor's Challenge 2023. Hardware Project is "Low-cost 3D printed Prosthetic Arm for Medical Rehabilitation".
- Remote Pilot Certificate. License No. PC092300005HN. Validity 10 years.

Trainings

- DGCA (Govt. of India) approved Remote Pilot Instructor Course, conducted by the Drone Destination, Gurugram, Delhi. Ground classes: 09th Nov-10th Nov 2023 and Flying & Simulation Training: 21st Nov-25th Nov 2023.
- DGCA (Govt. of India) approved Remote Pilot Training Course, conducted by Foundation for Organisational Research and Education. Fore Institute of Drone Technology and Research, Delhi. 11th Sep-15th Sep 2023.
- Project Title: The Impact of Dengue Vector Borne Disease at Every State & Union of India between 2010 to 2017 years at DEFENCE RESEARCH LABORATORY (DRL), Tezpur. 1st Aug- 30th Oct 2020.

GOOGLE SCHOLAR PROFILE:

<https://scholar.google.com/citations?hl=en&user=BhUiekUAAAAJ>

RESEARCHGATE PROFILE:

<https://www.researchgate.net/profile/Trisha-Paul-2>

ORCID: 0000-0003-2852-1046

REFERENCE:

1. Dr. Sheli Sinha Chaudhuri
Professor of ETCE Department,
Jadavpur University. Chair of
WIE IEEE Kolkata.
sheli.sinha@jadavpuruniversity.in

2. Dr. Swati Chowdhuri
Associate Professor of EEE
Department, IEM Kolkata.
swati.chowdhuri@iem.edu.in

SKILLS

- Data Analysis
- Bio signal Processing
- Image Processing
- Python
- Drone Technology
- MATLAB
- Origin Software

COMPLETED PROJECTS

- Human Emotion Recognition Using EMOTIV-5 Channel EEG Device
- Malaria detection using CNN and SVM (M.Tech. Thesis Paper)
- Low-Cost 3D Printed Prosthetic Arm operated by EMG Signals
- Multitasking Spider Robot (Unmanned Vehicles)
- Face Recognition system using Image Processing
- Locust Detection and Control system using Drone Technology

PATENTS

- Emergency protection for women's safety. **Application No. 202331026665**
- Smart air quality regulation system. **Application No. 202331056667**

PUBLICATIONS

SCI:

1. Advancements in optical sensors for explosive materials Identification: A comprehensive review. DOI: [10.1016/j.rechem.2024.101602](https://doi.org/10.1016/j.rechem.2024.101602)

SCOPUS:

1. Differential Sequence Analysis of EEG Brain Signals for Emotional and Cognitive Assessment. <https://doi.org/10.31449/inf.v50i1.6001>
2. NeuroSonic: An Innovative Neuroacoustic Therapy to Enhance Mental Wellness with EEG Brain Signal. DOI: [10.1109/CALCON63337.2024.10914300](https://doi.org/10.1109/CALCON63337.2024.10914300)
3. Low-Cost Portable IoT Based Air Purifying Ventilation System Operated by PPM Value Present in Environment. DOI: [10.1109/CALCON63337.2024.10914180](https://doi.org/10.1109/CALCON63337.2024.10914180)
4. A Low Cost Intelligent 3D-Printed Prosthetic Arm Controlled Exclusively by EEG Signals Using Adaptive Machine Learning.
DOI:10.1109/IEMENTech202669403.2026.11434304.

International Journals:

1. Exploring the Potential of EEG Signals in Mental State Analysis. DOI: [10.9734/bpi/mria/v3/3472G](https://doi.org/10.9734/bpi/mria/v3/3472G)
2. Human Emotion Recognition using GSR and EEG. DOI: [10.29322/IJSRP.10.05.2020.p10146](https://doi.org/10.29322/IJSRP.10.05.2020.p10146)
3. Approach of Mental State Analysis Using EEG. DOI: [10.29322/IJSRP.10.02.2020.p9805](https://doi.org/10.29322/IJSRP.10.02.2020.p9805)

Book Chapter:

1. Approach of Federated Learning book 29-8-2024 (1). September 2024. Page number 22.
2. Medical Research and Its Applications Vol. 3. 11 May 2024. Page 1-9.
<https://doi.org/10.9734/bpi/mria/v3/3472G>.