

Curriculum Vitae



Rajdeep Ghosh

Present Status:

PhD

Stream: Computer Science and Engineering

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Google Scholar Id: 31TsUHQAAAAJ
Researcher Id: AAZ-2899-2021

Career Objective: -

Dedicated professional with more than one objective to work in a challenging environment and to become a successful professional in a growing organization. As an experienced educational professional, I would like to utilize my earlier experience and knowledge in the field of education by working in favour of the esteemed organization and taking prompt decisions that would help in the advancement of organization and lead to inner peace and satisfaction.

Personal Profile

Father's Name:	Asit Ghosh
State:	Assam
Date of Birth:	12/02/1990
Sex:	Male
Marital Status:	Single
Nationality:	Indian
Category:	OBC
Religion:	Hinduism
Languages known:	English (read, write, speak), Bengali (read, write, speak), Hindi (read, speak), Assamese (read,speak)
Address for Correspondence:	H/N-31, BHOLAGIRI ASHRAM LANE,RANGIRKHARI, N.S.AVENUE,SILCHAR-5, CACHAR,ASSAM PIN-788005.
Educational Qualification:	B. TECH (IT), M.TECH (IT), Ph.D. (CSE)

Teaching Experience (Above 3 Years)

Date		Organisation	Post held	Functional Activities
From	To	Vellore Institute of Technology, Bhopal	Assistant Professor Grade I	Teaching, Research, and Administrative activities
31/03/2022	18/02/2024			
From	To	Gauhati University Institute of Science and Technology, Gauhati University	Assistant Professor (Contractual under NPIU, TEQIP III, Govt. of India)	Teaching, Research, and Administrative activities
04/09/2018	30/09/2021			
3 Years 11 Months				

List of Publications

Sl. No	Authors and Title of the Research Paper published	Publication Type	Year of publication, Vol. & No.	Name of the Journal/Conference	Indexing and Impact Factor
1.	R. Ghosh, N. Sinha, and S. Phadikar, “ Identification of Imagined Bengali Vowels from EEG Signals Using Activity Map and Convolutional Neural Network”	Book Chapter	Chapter 10, 2023, In Brain-Computer Interface (eds M.G. Sumithra, R.K. Dhanaraj, M. Milanova, B. Balusamy and C. Venkatesan) pp. 231-254 DOI: 10.1002/9781119857655.ch10 Published: 10/02/2023	Wiley Scrivener Publishing LLC Print ISBN: 9781119857204 Online ISBN: 9781119857655	NA
2.	R. Ghosh, S. Phadikar, N. Deb, N. Sinha, P. Das, and E. Ghaderpour, “Automatic Eye-blink and Muscular Artifact Detection and Removal from EEG Signals using k-Nearest Neighbour Classifier and Long Short-Term Memory Networks”	Journal	Volume 23, Issue: 5, 2023, pp. 5422-5436. DOI: 10.1109/JSEN.2023.3237383 Published: 01/03/2023	IEEE Sensors Journal (IEEE) Print ISSN: 1530-437X Electronic ISSN: 1558-1748	SCI(4.325)
3.	Md. Z. I. Ahmed , N. Sinha, E. Ghaderpour, S. Phadikar, and R. Ghosh, “A Novel Baseline Removal Paradigm for Subject-Independent Features in Emotion Classification Using EEG”	Journal	Volume 2023, 10(1), 54 , Jan 2023, pp.1-22. DOI: 10.3390/bioengineering10010054 Published: 01/01/2023	Bioengineering (Mdpi) ISSN: 2306-5354	SCI(5.046)

4.	S. Phadikar, N. Sinha, and R. Ghosh, "Unsupervised Feature Extraction with Autoencoders for EEG Based Multi-class Motor Imagery BCI"	Journal	Volume 213, Part A, 1 March 2023, 118901, pp. 1-10 DOI: 10.1016/j.eswa.2022.118901 Published: 26/09/2022	Expert Systems with Applications (Elsevier) ISSN: 0957- 4174	SCI(8.665)
5.	M. Grobbelaar ,S. Phadikar, E. Ghaderpour, A. F. Struck, N. Sinha, R. Ghosh and M. Z. I. Ahmed, "A Survey on Denoising Techniques of Electroencephalogram Signals Using Wavelet Transform"	Journal	2022; 3(3), 577- 586; pp. 1-10 DOI: 10.3390/signals3030035 Published: 17/08/2022	Signals (Mdpi) ISSN: 2624- 6120	Scopus
6.	R. Ghosh, N. Sinha, S. Phadikar, "Classification of Silent Speech in English and Bengali Language using Stacked Autoencoder"	Journal	Volume 3, Article number: 389 (2022) pp. 1-12 DOI: 10.1007/s42979-022-01274-y Published: 22/07/2022	SN Computer Science (Springer) eISSN: 2661-8907	Scopus
7.	S. Phadikar, N. Sinha, R. Ghosh, E. Ghaderpour, "Automatic Muscle Artifacts Identification and Removal from Single-Channel EEG Using Wavelet Transform with Meta-Heuristically Optimized Non-Local Means Filter".	Journal	2022; 22(8):2948. pp.1-21 DOI: 10.3390/s22082948 Published: 12/04/2022	Sensors (Mdpi) ISSN: 1424-8220	SCI(3.57)
8.	R. Ghosh, N. Deb, K. Sengupta, A. Phukan, N. Choudhury, S. Kashyap, S. Phadikar, R. Saha, P. Das, N. Sinha, and P. Dutta, "SAM 40: Dataset of 40 subject EEG recordings to monitor the induced-stress while performing Stroop color-word test, arithmetic task, and mirror image recognition task"	Journal	2022, Vol. 40, February 2022, 107772, pp.1-12 DOI: 10.1016/j.dib.2021.107772 Published: 01/01/2022	Data in Brief (Elsevier) ISSN: 2352-3409	Scopus

9.	S. Phadikar, N. Sinha, and R. Ghosh, "Automatic Eye Blink Artifact Removal from EEG Signal Using Wavelet Transform with Heuristically Optimized Threshold"	Journal	2021, Vol. 25, Issue 2, pp. 475-484 DOI: 10.1109/JBHI.2020.2995235 Published: 18/05/2020	IEEE Journal of Biomedical and Health Informatics Print ISSN: 2168-2194 Electronic ISSN: 2168-2208	SCI (5.772)
10.	S. Phadikar, N. Sinha, and R. Ghosh, "Automatic EEG eyeblink artefact identification and removal technique using independent component analysis in combination with support vector machines and denoising autoencoder"	Journal	2020, Vol.14, Issue 6, pp. 396-405 DOI: 10.1049/iet-spr.2020.0025 Published: 03/06/2020	IET Signal Processing Online ISSN 1751-9683 Print ISSN 1751-9675	SCI (1.489)
11.	R. Ghosh, N. Sinha, S.K. Biswas, and S. Phadikar, "A modified grey wolf optimization based feature selection method from EEG for silent speech classification"	Journal	2019, Vol. 40, Issue 8, pp. 1639-1652 DOI: 10.1080/02522667.2019.1703262 Published: 02/02/2020	Journal of Information and optimization sciences (Taylor & Francis) Print ISSN: 0252-2667 Online ISSN: 2169-0103	ESCI
12.	R. Ghosh, N. Sinha, and S.K. Biswas, "Automated eye blink artefact removal from EEG using support vector machine and autoencoder"	Journal	2018, Vol. 13, Issue 2, pp. 141-148 DOI: 10.1049/iet-spr.2018.5111 Published: 30/08/2018	IET Signal Processing Online ISSN 1751-9683 Print ISSN 1751-9675	SCI (1.489)
13.	R. Ghosh, N. Sinha, and N. Singh, "Emotion recognition from EEG signals using back propagation neural network"	Conference	2 nd International Conference on Innovations in Electronics, Signal processing and communication (IESC,2019) 1-2 March, 2019 NIT Meghalaya, Page: 188-191 DOI: 10.1109/IESPC.2019.8902418 Published:	International (Within Country) Electronic ISBN: 978-1-7281-0744-8 Print on Demand(PoD) ISBN: 978-1-7281-0745-5	NA

			18/11/2019		
14.	S. Phadikar, N. Sinha, and R. Ghosh,"A Survey on Feature Extraction Methods for EEG Based Emotion Recognition"	Conference	1st International Conference on Innovation in Modern Science and Technology ICIMSAT-2019, Siliguri, India 20-21 September, 2019, Siliguri Institute of Technology Page: 31-45 DOI: 10.1007/978-3-030-42363-6_5 Published: 03/03/2020	International (Within Country) (LAIS, volume 12) Print ISBN: 978-3-030-42362-9 Online ISBN:978-3-030-42363-6	NA
15.	R. Ghosh, V. Kumar, N. Sinha, and S.K. Biswas," Motor imagery task classification using intelligent algorithm with prominent trial selection"	Journal	2018, Vol. 35, Issue 2, pp. 1501-1510 DOI: 10.3233/JIFS-169690 Published: 26/08/2018	Journal of Intelligent & Fuzzy Systems (IOS press) ISSN online 1875-8967	SCI (1.851)
16.	R. Ghosh, N. Sinha, and S.K. Biswas,"Removal of Eye-Blink Artifact from EEG Using LDA and Pre-trained RBF Neural Network"	Conference	6 th International Conference on Advanced Computing, Networking and Informatics (ICACNI 2018) 4-6 June, 2018, NIT Silchar, Page: 217-225 DOI: 10.1007/978-981-13-9683-0_23 Published: 01/12/2019	International (Within Country) (AISC, volume 766) Print ISBN 978-981-13-9682-3 Online ISBN 978-981-13-9683-0	NA

Sponsored Research Project

Sl. No	Project Title	PI/ Co-PI	Funded By	Amount in Lakhs	Status
1.	Monitoring Stress in Students using EEG. (Dr. Nidul Sinha, Dr. Nabamita Deb, Dr. Pranesh Das, Dewan Imdadul Islam)	PI	NPIU-MHRD	15.43 Lakhs	Completed From 18/06/2019 To 30/06/2021
2.	Seamless Health Monitoring and Analysis of soldier using Machine Learning Approach (Dr. Tanuja Das, Dr. Vaskar Deka, Dr. Rashmi Dutta Baruah, Dr. Ramesh Saha)	Co-PI	NPIU-MHRD	11.08 Lakhs	Completed From 18/06/2019 To 30/09/2021

Patent

Sl. No	Title of Patent	Owner(s)	Applicant	Status	Date
1.	German Patent: Ein hybrides System zur automatischen Entfernung von Augenblinzeln-Artefakten aus Elektroenzephalogrammsignalen (English: A hybrid system for automatically removing eye blink artifacts from electroencephalogram signals)	1. Dr. Rajdeep Ghosh 2. Dr. Ripon Patgiri 3. Souvik Phadikar 4. Nidul Sinha	Nidul Sinha	Granted (Utility Patent) German Patent and Trade Mark Office	Certificate Number: 20 2022 100 822 03/03/2022

Skills and Exams Cleared

Programming Language: C, Matlab, Python.
GATE Qualified: 2013, 2014
NET Qualified: 2018

Workshops/Schools/Short Term Courses Attended

Sl. no	Name of the Seminar/Workshops, etc.	Date	Venue	Sponsored by
1.	13 th Workshop on Computational Information Processing	3-7 Dec, 2012	Assam University	Assam University

2.	One week workshop on Applications of Machine Learning	20-24 Mar, 2017	NIT Silchar	TEQIP II
3.	GIAN Course on Brain computer Interface for speech communication: Theory & Application	26 th Feb- 2 nd Mar, 2018	IIT Guwahati	MHRD
4.	Summer Training Program on Advanced Pedagogy and Digital Tools	10-14 Jun, 2019	IIT Gandhinagar	TEQIP III
5.	7 Days Workshop on Hands-on Machine Learning using Python Programming	16-22 Aug, 2020	Gauhati University	TEQIP III

Thesis

Degree: B.Tech

Title: Quantum Inspired Evolutionary Algorithm for solving Multiple Travelling Salesman Problem

Guide: Bhagaban Swain

Degree: M.Tech

Title: Analysis of Quantum Key Distribution Protocol BBM92 Using Bucket Detector

Guide: Bhagaban Swain

Degree: Ph.D

Title: Some Studies on Silent Speech Recognition from Brain Waves

Guide: Dr. Nidul Sinha

Research Area

Machine learning, Optimization algorithms, Brain computer interface.

UG Projects Guided

Sl. no	Title of the Project	Student's Name	Year	Department & Institute
1.	Detection of Short Term and Long Term Stress in College Students using EEG	Kaushik Sengupta, Nitish Baruah	2021	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
2.	Pharmacy Management System	Sohail Islam, Aquib Alam	2021	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
3.	Real Time Face Recognition Based Automated Attendance System	Syed Soban Ahmed, Arshad Zubair	2021	Dept. of Information Technology, Gauhati University Institute of Science and Technology,

				Guwahati
4.	Automatic Detection of P300 Signal using Non-linear Support Vector Machine	Sagar Choudhury, Arindam Bharati	2020	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
5.	Automatic Face Mask Detection System	Jyotirmay Nath, Shouvik Kar	2020	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
6.	Modelling of Peltier Module For Photovoltaic Cell	Rakesh Kalita, Baishali Roy	2020	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
7.	Coronary Heart Disease Prediction Using Clustering Algorithm Approach	Suhas Roy	2020	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
8.	Disease Prediction using Feature Selection, Classification and Clustering Approach	Geetanjalee Sharma	2020	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
9.	Image Based System for Detection of Plant Diseases using Image processing	Angrika Hazarika, Mousumi Kalita	2019	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
10.	Face Recognition System using PCA Algorithm	Himanshu Sarma, Dipak Taye	2019	Dept. of Information Technology, Gauhati University Institute of Science and Technology, Guwahati
11.	Content Based Image Retrieval Using Color Feature	Masoom Bordoloi Amsih, Abishek Kemprai	2019	Dept. of Information Technology, Gauhati University Institute of Science and Technology,

				Guwahati
PG Dissertations Guided				
Sl. no	Title of the Project	Student's Name	Year	Department & Institute
1.	Psychological Stress Assessment in Students Using EEG	Ramjan Ali	2020	Dept. Of Information Technology, Gauhati University Institute of Science and Technology, Guwahati

Declaration: -

I consider myself familiar with Computer Science and Engineering aspects. I am also confident of my ability to work in a team or alone.

I hereby declare that the information furnished above is true to the best of my knowledge.



Date: - 21/03/2024

Rajdeep Ghosh