Dr. Geetika Srivastava
M.Sc. (Electronics), Ph.D.(Electronics)

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Work Experience   13Years (Teaching, Research and Training)

Research Interest:

Machine Learning, Neural Networks, Biomedical Data Processing, System on Chip (SoC) Design.

Computer Skills:

MATLAB (Brainstorm, EEG Lab, Neural Network Tool Box, Simulink, Signal Processing), Python, SPSS, R, VHDL, Verilog Programming.

Mathematical Skills:

Multivariate Analysis, Wavelet Transforms, Neural Networks based Classifier Design, Fuzzy Logic based Optimization techniques.

Google Scholar Profile
h index   06
i10 Index 03
Citations 93

Publications
(SCOPUS Indexed Publication 17)

A. *International Journal:* (20)
B. *Full Papers in Indexed Conference Proceedings:* (12)
C. *Papers Presented in Conferences:* (22)
D. *Books Written* (02 International and 03 National)

Research Project:

Currently involved in "early diagnosis of Epilepsy" with Department of Neurology, RML Institute of Medical Sciences, Lucknow, India, and designed a neural network classifier that correctly classifies epileptic/non epileptic datasets

Recent Courses/Training:

ICTP(Italy) Online Program "Youth in High Dimensions: Machine Learning High Dimensional Statistics an Inference for New Generation", 29 June to 3 July, 2020.

ICTP(Italy) training program on International School on SoC design for Scientific Instrumentation, 2-8

November 2019

ICM-Paris and Cutting EEG, FMRI, December 2019

Certificate on Advanced Machine Learning from University of Washington, 2017

Online course on Data Visualization and Classification,2019

Reviewer/ Editor International Journals:

Editorial Secretary, Journal of International Academy of Physical Sciences, ISSN: 0974-9373
Reviewer International Journal Telkomnika (Scopus Indexed) ISSN: **1693-6930**
Reviewer International Journal of Electrical and Computer Engineering (IJECE) (Scopus Indexed)
ISSN: 2088-8708

Professional Background

1- Associate Professor, Department of Physics and Electronics, Dr. RML Avadh University Ayodhya (U.P.) India, (14th June2018 - till date)

2- Assistant Professor, Department of ECE, Amity University Uttar Pradesh Lucknow, India(2006-2018)

3- Lecturer, Department of Electronics, Banasthali Vidyapeeth Rajasthan, India (2005 to 2006)

4- Lecturer, Department of Electronics, DDU Gorakhpur , University Gorakhpur, India (2003 to 2005)

5- Project Trainee, MEMS and Micro Sensor Group, CSIR- CEERI Pilani, Rajasthan, India (2002 to 2003)

Award and Honors

University Gold Medal, PG level for highest marks, DDUGU, Gorakhpur, India

DST-INSPIRE best faculty coordinator award, AUUP Lucknow

IET-UK Faculty Coordinator award for outstanding contribution, AUUP

Elsevier Author Award for Research Article "Smart Healthcare and Innovations", 2020, 100 USD

IISF-2018(India International Science Festival-2018) Award for "Women Scientist of Innovation and Grit"

E. Member of Professional Bodies

Life Member IETE
Member IEEE
Life Member IAPS

F. Supervision of Doctoral Thesis:

Awarded 02, Ongoing 02

G. Dissertation Supervised (M.Sc./M.Tech):

Awarded 11, Ongoing 02

Invited Talk/ Session Chair (18)

1. **Keynote Speaker**: "National FDP on MATLAB Tools and Applications", Organized by Department of Mathematics BBDNIIT, Lucknow, 7th to 9th August 2020.
2. **Invited Talk**: "Crypto graphy in Machine Learning", Online National Instuctional Workshop on Cryptology, Organized by School of Computer and System Science, Jawahar Lal Nehru University(JNU), New Delhi in association with Cryptology Research Society of India 26 July 2020.
3. **Invited Talk**: "Deep Learning Based IoT Edge Computing", Atal FDP at Jawahar Lal Nehru University(JNU), New Delhi, 04 June 2020.
4. **Convenor**,"International Webinar on Technology Redefining Global Economy: Post COVID",at Dr. RMLAU, Ayodhya, India, 31 May 2020.
5. **Convenor**,"National Webinar on Post COVID19 Challenges for Job Seekers and Entrepreneurs",at Dr. RMLAU, Ayodhya, India, 26 April 2020.

6. **Convenor**: "International Conference on Industry 4.0" and 62nd Annual IETE Convention, 28-29, September 2019.
7. **Invited Talk:** "Hilbert-Huan Transform for Epileptic/ non epileptic Data Classification", in International Conference on Industry 4.0, 28-29, September 2019.
8. **Invited Talk: "**How to Manage Your Resources for Report Writing", National Workshop on Research Methodology, Research For Resurgence Foundation and Dr. RML Avadh University Ayodhya, 20-26 May 2019.
9. **Organizing Secretary**: National Seminar on Recent Advances in Material Science and Electronics, Department of Physics and Electronics, Dr. Rammanohar Lohia Avadh University Ayodhya. 27-28 February 2019.
10. **Invited Talk:** BLE-Bluetooth Low Energy: A Breakthrough in Wireless Sensor Data Monitoring**, International Conference CONIAPS XII** 13-15 April, **2018**
11. **Invited Talk:** Hands on Session on Mathematical Modeling of Pollution Content in Water Resources, "International Conference on Impact of Environment on Women's Health" **, IET-UK and Amity University** 28-30 November,**2017**
12. **Session Chair:** National Conference on Recent Advancement in Communication Engineering and Microelectronics, MMMUT Gorakhpur and TEQIP II, 9-10 March **2016**
13. **Invited Talk**: "MATLAB for Embedded System Design", Faculty Development Programme on MATLAB, Academic Staff College, Integral University, Lucknow, 1-6 February **2016**
14. **Convenor**: "One Day Seminar on Simulation and Control of Mechatronic Systems Using MATLAB" Mathworks India in Association with Amity University Lucknow, 17 March **2016**
15. **Convenor**: "Design and Development of Embedded Systems and Robotics with Arduino" Inventrom Technologies in association with Department of Electronics and Communication, ASET AUUP Lucknow, 8-9 September **2015**
16. **Invited Talk**: "Use of MATLAB in Application of Numerical Methods", Short Term Course on Application of Statistical and Mathematical Techniques ASMT-2015, Department of Statistics and Mathematics, Amity School of Applied Sciences Lucknow 14-19 December **2015**
17. **Invited Talk**: "Computers and Future of Learning", National Seminar on Development of Mathematical Principle with their Advancement in Computer Science, Isabella Thoburn College, Lucknow 17-18 November **2015**
18. **Convener**: "National Conference on Integrated Circuits and Signal Processing", IET-UK and Amity University 25-26 September **2014**

Recent important publications (SCOPUS Indexed)

"Fuzzy Entropy Based Seizure Detection in Epileptic EEG Data Analysis"	Tripathi, A. Srivastava, G. Singh, K.K., Maurya, P.K.	2020	Smart Healthcare for Disease Diagnosis and Prevention **Elsevier.**
Epileptic seizure data classification using RBAs and linear SVM Open Access	Tripathi, A. Srivastava, G. Singh, K.K., Maurya, P.K.	2019	Biomedical and Pharmacology Journal
DFT analysis of power spectral density on EEG signals for diagnostic understanding of epilepsy	Tripathi, A., Srivastava, G., Singh, K.K., Maurya, P.K.	2019	ARPN Journal of Engineering and Applied Sciences
Review of unsupervised adaptive resonance theory	Tripathi, A., Srivastava, G., Singh, K.K., Maurya, P.K.	2019	Proceedings of the 9th International Conference On Cloud Computing, Data Science and Engineering, Confluence 2019
Epileptic Data Classification Using Frequency Power Estimation of Channel (FP1-F7) in Children	Tripathi, A. Srivastava, G. Singh, K.K., Maurya, P.K.	2018	7th International Conference on Reliability, Infocom Technologies and Optimization: Trends and Future Directions, ICRITO 2018
Classification of ECG signals using cross-recurrence quantification analysis and probabilistic neural network classifier for ventricular tachycardia patients	Saraswat, S., Srivastava, G., Shukla, S.	2018	International Journal of Biomedical Engineering and Technology
Classification of ECG signals related to paroxysmal atrial fibrillation	Saraswat, S., Srivastava, G., Shukla, S.	2018	Smart Innovation, Systems and Technologies
Decomposition of ECG signals using discrete wavelet transform for wolff Parkinson white syndrome patients	Saraswat, S., Srivastava, G., Shukla, S.	2017	Proceedings - 2016 International Conference on Micro-Electronics and Telecommunication Engineering, ICMETE 2016
Wavelet transform based feature extraction and classification of atrial fibrillation arrhythmia Open Access	Saraswat, S., Srivastava, G., Shukla, S.	2017	Biomedical and Pharmacology Journal
Diagnosis of narcolepsy sleep disorder for different stages of sleep using Short Time Frequency analysis of PSD approach applied on EEG signal	Siddiqui, M.M., Srivastava, G., Saeed, S.H.	2016	2016 International Conference on Computational Techniques in Information and Communication Technologies, ICCTICT 2016 - Proceedings
Diagnosis of insomnia sleep disorder using short time frequency analysis of PSD approach applied on EEG signal using channel ROC-LOC Open Access	Siddiqui, M.M., Srivastava, G., Saeed, S.H.	2016	Sleep Science **Elsevier**
ECG signal decomposition using PCA and ICA	Kanaujia, M., Srivastava, G.	2016	RAECE 2015 - Conference Proceedings, National Conference on Recent Advances in Electronics and Computer Engineering
"Detection of rapid eye movement behavior disorder using short time frequency analysis of PSD approach applied on EEG signal (ROC-LOC)"	Siddiqui, M.M., Srivastava, G., Saeed, S.H.	2015	Biomedical Research 2015; 26 (3): 587-593ISSN 0970-938X (Scopus Indexed)