SRM Institute of Science&Technology
Delhi-NCR Campus, Modinagar, Ghaziabad
Department of Computer Applications

FACULTY PROFILE

Name: Dr. Anjani Kumar Singha

Designation: Assistant Professor

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Professional Qualification:

- **Ph.D** in Department of Computer Science, Aligarh Muslim University (AMU), Aligarh, 2023.

- **MCA** (Master of Computer Applications) from Gurukula Kangri Vishwavidyalaya, Haridwar(Government Unversity).

Publications (Journals & Conferences):

- **Singha, A. K., & Zubair, S. Design of ANN based non-linear network using interconnection of parallel processor. CSSE Journal [SCIE (Q3)](IF: 4.477).**
- **Zubair, S., Singha, A. K. Performance Enhancement of Adaptive Neural Networks Based on Learning Rate. CMC-COMPUTERS MATERIALS & CONTINUA, [SCIE (Q2)] (IF: 3.863).**
- **Pathak, N., Siddiqui, S. T., Singha, A. K. Smart Quarantine Environment Privacy through IoT Gadgets Using Blockchain. Intelligent Automation & Soft Computing [SCIE (Q3)] (IF: 3.401).**

- Singha, A. K., Pathak, N., Sharma, N., Zubair, S. & Nagalaxmi, G. (2022). An Experimental Approach to Diagnose Covid-19 Using Optimized CNN. Intelligent Automation & Soft Computing [SCIE (Q3)] (IF: 3.401).
- Sultana, J., Singha, A. K., Siddiqui, S. T., Nagalaxmi, G. COVID-19 Pandemic Prediction and Forecasting Using Machine Learning Classifiers. Intelligent Automation & Soft Computing, [SCIE (Q3)] (IF: 3.401).
- Sultana, J., and Singha, A. K., "Deep CNN Based on Adaptive Gradient Optimizer and its Convergence" Transactions on Emerging Telecommunications Technologies (Under Revision) [SCIE] (IF: 4.5).
- Singha, A.K., Pathak, N., Zubair, S.,and Larguech, S. An Efficient Integrated Optimize Method Based on Adaptive Meta Optimizer. IEEE Access (Under Revision) [SCIE (Q1) Institute of Electrical and Electronics Engineers] (IF: 3.401).
- Singha, A. K., & Zubair, S.," Enhanced Swarm Intelligence with Metaheuristic for CNN Hyperparameter Optimization," Transactions on Emerging Telecommunications Technologies (2023) (Under Revision) [SCIE (Q1)] (IF: 6.00).
- Singha, A.K., Zubair, S., A CNN-LSTM Based Hybrid Deep Learning Model to Analyze Classification Performance on MNIST Dataset. Evolving systems, (Under Revision) [SCIE (Q2) Springer] (IF: 3.2).
- Singha, A. K., & Zubair, S. (2020). Enhancing the efficiency of the stochastic method by using non-smooth and non-convex optimization. J Univ Shanghai Sci Technol [SCOPUS (Q4)].
- Singha, A. K., & Zubair, S.," Combination of Optimization Methods in a Multistage Approach for a Deep Neural Network Model," International Journal of Information Technology (2023), [SCOPUS) (Q1)].
- Singha, A. K., & Zubair, S.," Estimating Computer Network Security Scenarios with Association Rules," Journal of Discrete Mathematical Sciences and Cryptography (2024), [SCOPUS) (Q1)]
- Singha, A. K., & Tiwari, P.," Measuring Network Security in the Cloud: A Roadmap for Proactive Defense," Journal of Discrete Mathematical Sciences and Cryptography (2024), [SCOPUS) (Q1)]
- Zubair, S., & Singha, A. K. (2020). Parameter optimization in convolutional neural networks using gradient descent. In Microservices in Big Data Analytics: Second International, ICETCE 2019, Rajasthan, India, February 1st-2nd 2019, Revised Selected Papers (pp. 87-94). Springer Singapore. SCOPUS INDEX-2020.
- Zubair, S., & Singha, A. K. (2021). Network in sequential form: combine tree structure components into recurrent neural network. In IOP conference series: materials science and engineering (Vol. 1017, No. 1, p. 012004). IOP Publishing. SCOPUS INDEX-2021.
- Siddiqui, S. T., Ahmad, M. O., Khamruddin, M., Gupta, A. K., & Singha, A. K. (2022, January). Blockchain and IoT for educational certificates generation and verification. In 2022 2nd international conference on computing and information technology (ICCIT) (pp. 298-303). IEEE., SCOPUS INDEX-2022.
- Singha, A. K., & Zubair, S. (2022). Machine learning for hypothesis space and inductive bias: a review. AIJR Abstracts, 70.. SCOPUS INDEX-2022.
- Siddiqui, S. T., Singha, A. K., Ahmad, M. O., Khamruddin, M., & Ahmad, R. (2022). IoT devices for detecting and machine learning for predicting COVID-19 outbreak. In Recent Trends in Communication and Intelligent Systems: Proceedings of ICRTCIS 2021 (pp. 107-114). Singapore: Springer Nature Singapore. SCOPUS INDEX-2022.
- Singha, A. K., Pathak, N., Sharma, N., Tiwari, P. K., & Joel, J. P. C. (2022). Forecasting COVID-19 Confirmed Cases in China Using an Optimization Method. In Emerging Technologies in Data Mining and Information Security: Proceedings of IEMIS 2022, Volume 2 (pp. 683-695). Singapore: Springer Nature Singapore. SCOPUS INDEX-2022.
- Singha, A. K., Pathak, N., Sharma, N., Tiwari, P. K., & Joel, J. P. C. (2022). COVID-19 Disease Classification Model Using Deep Dense Convolutional Neural Networks. In Emerging Technologies in Data Mining and Information Security: Proceedings of IEMIS 2022, Volume 2 (pp. 671-682). Singapore: Springer Nature Singapore. SCOPUS INDEX-2022.

- ➤ **Singha, A. K., and , Tiwari, P. K., (2023), A Deep Learning Approach for Basic Understanding of Convolution Neural Network and it Optimization. 10th International Workshop On Soft Computing Applications (SOFA 2022) Arad-Romania, 21-23 November 2022(Accepted).**
- ➤ **Singha, A. K., and , Tiwari, P. K., (2023), Modified Size Matrix for Component-Based Software Engineering Development. 10th International Workshop On Soft Computing Applications (SOFA 2022) Arad-Romania, 21-23 November 2022(Accepted).**
- ➤ **Singha, A. K., and , Tiwari, P. K., (2023), Deep Neural Networks Performance Comparison for Handwritten Text Recognition. International Conference On "Mobile Radio Communications & 5G Networks, (MRCN-2023), 25-26 Aug, 2023.**
- ➤ **Singha, A. K., and , Tiwari, P. K., (2024), Water Treatment through PVDF-HFP based Membrane in DCMD ,"Recent technology and innovation in electronics and photonics-2024"(Accepted).**
- ➤ **Singha, A. K., and , Tiwari, P. K., (2024), Transformative Trends: Analyzing the Integration of Block chain in Banking Operations, International Conference on Advances in Computing, Communication and Intelligent Systems", ICACCIS'2024.**

Awards and Achievements

- ➤ Best Paper Award 2023, and 2024
- ➤ Qualified NET in 2013, 2014, 2015 and 2016.

- ➤ Awarded National Fellowship for Other Backward Classes in 2022

Workshops/Seminars/FDPs

➤ ONE WEEK WORKSHOP on" Programming & Documentation with R", Aligarh Muslim University, Aligarh (Workshop-2023).
➤ ONE WEEK WORKSHOP on" STATISTICS & OPTIMIZATION TECHNIQUES USING SOFTWARE PACKAGES", Aligarh Muslim University, Aligarh (Workshop-2023).
➤ Artificial Intelligence using Python" organized by Brain vision Solutions India Pvt.Ltd. & National Youth Council of India (FDP-2020).
➤ ONE WEEK WORKSHOP on "Programming & Documentation with R", Aligarh Muslim University, Aligarh (Workshop-2021).
➤ Research Avenues in Production & Industrial Engineering, Department of Industrial & Production Engineering, College of Technology, G.B. Pant University of Agriculture & Technology, Pantnagar, Uttrakhand(Workshop-2021).
➤ Deep learning and cyber security, Madanapalle Institute of Technology and science (FDP-2021).
   Webinar on Artificial Intelligence (AI) and Mass Media, Bharati Vidyapeeth's Institute of Computer (FDP-2022).

Work Experience: 2+ Years

Professional Memberships: