

## Faculty Profile

Name : Dr. Savita  
Designation : Associate Professor  
Qualifications : PhD, MTech, B.E.  
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Area of Interest/Specialization: Machine Learning, Deep Learning,  
Artificial Intelligence, Computer Vision



Experience : 17 years

### Key Publications

1. J.Bindra, S.Ahlawat, M.Javed, “Modified COVID-19 Indian and international dataset for automatic prediction of risk in an individual using machine learning models using a mobile APP,” International Journal of Intelligent Engineering Informatics, 2021.
2. S.Ahlawat, A. Choudhary, A.Nayyar, S. Singh, B. Yoon, “Improved Handwritten Digit Recognition Using Convolutional Neural Networks (CNN)”, Sensors, Vol 20 No.12, pp.3344-3362, 2020
3. S.Ahlawat, A.Choudhary, “Hybrid CNN-SVM Classifier for Handwritten Digit Recognition”, Procedia Computer Science, Vol.167, pp. 2554-2560, 2020, ISSN 1877-0509, <https://doi.org/10.1016/j.procs.2020.03.309>.
4. S. Ahlawat, A. Choudhary, “Off-line Handwritten Character Recognition using Geometric Moment Features and Fuzzy Clustering, International Journal of Recent Technology and Engineering (IJRTE), Vol. 8, No.1, pp. 3001-3006, 2019
5. S. Ahlawat, R. Rishi, “A Genetic Algorithm Based Feature Selection for Handwritten Digit”, Recent Patents on Computer Science, Vol.12, No. 4, pp. 304-316, 2019
6. A.Choudhary, S.Ahlawat, “Off-line Handwritten Character Recognition using Geometric Moment Features and Fuzzy Clustering”, published in International Journal of Recent Technology and Engineering (IJRTE), Vol.8, Issue1, pp.3001-3006, ((ISSN:2277-3878), 2019.
7. A.Choudhary, R. Rishi, S.Ahlawat, A New Approach to Detect and Extract Characters from Off-Line Printed Images and Text” published in Elsevier’s Procedia Computer Science Journal, (ISSN: 1877-0509), Vol. 17, pp. 88-95, May 2013,
8. A.Choudhary, R. Rishi, S.Ahlawat, “A New Character Segmentation Approach for Off-Line Cursive Handwritten Words” Elsevier’s Procedia Computer Science Journal, (ISSN: 1877-0509), Vol. 17, pp. 434-440, May 2013
9. A.Choudhary, R. Rishi, S.Ahlawat, “Off-Line Handwritten Character Recognition using Features Extracted from Binarization Technique” in Elsevier’s AASRI Procedia Journal (ISSN: 2212-6716), Vol. 4, pp. 313-318, Nov 2013.

10. A.Choudhary, R. Rishi, S.Ahlawat, V.Dhaka, "Optimal Feed Forward MLP Architecture for Off-Line Cursive Numeral Recognition" published in International Journal on Computer Science and Engineering , Vol. 02, No.01S, pp. 1-7, 2010 (ISSN: 0975-3397)
11. A.Choudhary, R. Rishi, V.Dhaka, S.Ahlawat, "Influence of Introducing an Additional Hidden Layer on the Character Recognition Capability of a BP Neural Network having One Hidden Layer" published in International Journal of Engineering and Technology (IJET) ISSN: 0975-4024.
12. A.Choudhary, R. Rishi, S.Ahlawat, V.Dhaka, "Totally Unconstrained Handwritten Character Recognition using Improved BP Neural Network", International Journal of Information Technology & Knowledge Management (IJITKM), 2010

#### Papers presented in Conferences

1. J. Bindra, B.Rajesh, S.Ahlawat, "Deeper into Image Classification. In: Gupta D., Khanna A., Bhattacharyya S., Hassanien A.E., Anand S., Jaiswal A. (eds) International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing, vol 1166, pp 69-81, 2021, Springer, Singapore. [https://doi.org/10.1007/978-981-15-5148-2\\_7](https://doi.org/10.1007/978-981-15-5148-2_7)
2. P.Kherwa., S.Ahlawat, R. Sobti, S. Mathur, G.Mohan, "Predicting Socio-economic Features for Indian States Using Satellite Imagery" International Conference on Innovative Computing and Communications(ICICC-2020), pp 497-508, 2020
3. A. Choudhary, S. Ahlawat, H.Gupta, A. Bhandari, A.Dhall, M. Kumar, "Offline Handwritten Mathematical Expression Evaluator Using Convolutional Neural Network". In: Gupta D., Khanna A., Bhattacharyya S., Hassanien A.E., Anand S., Jaiswal A. (eds) International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing, vol 1166, pp 527-537, 2021 Springer, Singapore. [https://doi.org/10.1007/978-981-15-5148-2\\_47](https://doi.org/10.1007/978-981-15-5148-2_47)
4. S.Ahlawat, V. Batra, S.Banerjee, J.Saha,A.K.Garg, "Hand Gesture Recognition Using Convolutional Neural Network". In: Bhattacharyya S., Hassanien A., Gupta D., Khanna A., Pan I. (eds) International Conference on Innovative Computing and Communications. Lecture Notes in Networks and Systems, vol 56, pp 179-186, Springer, Singapore. [https://doi.org/10.1007/978-981-13-2354-6\\_20](https://doi.org/10.1007/978-981-13-2354-6_20), 2019

#### Awards and Recognitions

Got letter of appreciation from President, Surajmal Memorial Education Society for rendering excellent services for the growth of the institute and getting excellent results in last three academic sessions (i.e. 2012-13, 2013-14, 2014-15)

#### Memberships of Professional bodies

1. The Institute of Electrical and Electronics Engineers (IEEE)- (Membership Number-92498810)
2. Indian Society of Technical Education (I.S.T.E)- (Membership Number-108182)