



## Department of Artificial Intelligence and DataScience

### FACULTY DETAILS

<b>Staff Name</b>	:	Dr. B.SENTHILNAYAKI
<b>Date of Birth</b>	:	21/01/1980
<b>Educational Qualification</b>	:	B.TECH(IT), M.Tech (IT), Ph.D
<b>Area of Interest</b>	:	Machine Learning, Deep Learning, Artificial Intelligent, Internet of Things
<b>Years of Experience</b>	:	14 yrs
<b>Area of Research</b>	:	Security Methods Using Intrusion Detection for E-Learning Documents
<b>No of Student Projects Guided</b>	:	UG – 40 PG – 30
<b>Supervisor</b>	:	
<b>FDP &amp; Workshop Funding</b>	:	
<b>Research Projects (Granted)</b>	:	
<b>R &amp; D Activities</b>	:	<p><b>Publications</b></p> <p><b>List of Journals</b></p> <p>Senthilnayaki, B, Venkatalakshmi, K &amp; Kannan, A, 'Intrusion Detection System Using Fuzzy Rough Set Feature Selection and Modified KNN Classifier' The Arab International Journal of Information Technology (SCI Indexed), vol.16, no.5, 2019.</p> <p><b>Publication Details</b></p> <p>: Senthilnayaki, B, Venkatalakshmi, K &amp; Kannan, A, 'An Ontology Based Framework for Intelligent Web Based e-Learning', International Journal of Intelligent Information Technologies IGI Global, vol.11, no. 2, pp. 23-39, 2015.</p> <p>Senthilnayaki, B, Venkatalakshmi, K &amp; Kannan, A, 'A fuzzy Similarity based Approach for Intelligent Web Based e-Learning', CoRR abs/1302.1971, 2013.</p>

Senthilnayaki Balakrishnan, Venkatalakshmi, K & Kannan, A, 'Intrusion Detection System Using Feature Selection and Classification Technique', International Journal of Computer Science and Application, vol.3, no.4, pp.146-151, 2014.

Senthilnayaki, B, Venkatalakshmi, K & Kannan, A, 'Intrusion Detection System Using Naïve Bayesian and SVM Classifier', International Journal of Applied Engineering Research, vol.10, no.72, pp.408-413, 2015.

Senthilnayaki, B, Chandralekha, M & Venkatalakshmi, K, 'Survey of Data Mining Techniques used for Intrusion Detection', International Journal of Technology and Engineering System, vol. 7, no.2, pp. 166-171, 2015.

Senthilnayaki, B, Kavya, J & Venkatalakshmi, K, 'A Survey of Intrusion Detection System using Classification', International Journal of Technology and Engineering System, vol. 7, no.3, pp. 213-218, 2015.

Senthilnayaki B, Swetha M and Nivedha D, "Customer Churn Prediction", International Advanced Research Journal in Science, Engineering and Technology, vol8, no.6, pp. 527-531, 2021.

Senthilnayaki B, Keerthana S and Sowmya H, "Automatic License Plate Detection and Recognition", International Advanced Research Journal in Science, Engineering and Technology, vol8, no.8, pp 527-531, 2021.

Senthilnayaki B, Anbarasi N, Prasath Kumar S, Mahalakshmi G, Duraimurugan J, "IoT: Analysis of Various Attacks Using AODV Protocol", International Journal of Progressive Research in Science and Engineering, Vol.2, No.11, Pp 29-32, 2021.

Senthilnayaki B, Mahalakshmi G, Duraimurugan J, Anbarasi N, Prasath Kumar S, "Intrusion Detection Using Information Gain Feature Selection and Classification", International Research Journal of Humanities and Interdisciplinary Studies, Volume 2 Issue 11, 2021.

Senthilnayaki B, Mahalakshmi G, Amirthalingam R, Duraimurugan J, Anbarasi S, Malicious Android Apps Identification Applying Machine Learning Techniques, International Research Journal of Humanities and Interdisciplinary Studies, Volume 2 Issue 9, pp 123-144, 2021.

Senthilnayaki B, Mahalakshmi G, Devadharani U, Karthikeyan M, Rohith A, "Shimaali Riyasudeen, Human Face Recognition for Attendance System", International Journal of Advances in Engineering and Management, Volume 4, Issue 2, pp 596-602, 2022.

Senthilnayaki, B, Nivetha G & Venkatalakshmi, K, Optimal Feature Selection and Classification Algorithms for Intrusion Detection System, International Journal of Emerging Technologies in Engineering Research, vol 9, no 11, pp 21-28, 2021.

B. Senthilnayaki, C. Rajeswary, G. Nivetha, P., Mahalakshmi G, Dharanyadevi P and Narashiman D, "Detection of Attacker using Honeywords", International Journal of Trend in Scientific Research and Development, vol.6, no.4, pp 827-831, 2022.

B. Senthilnayaki "Enhanced Data Sharing IoT Server Platform Using Blockchain" Journal of emerging technologies and innovative research (IETIR) Volume 9 Issue 9 , September-2022 Date of Publication: 2022-09-30

Senthilnayaki B, Prabakaran M S, Predictive Analysis for Raw materials in Restaurants, Mukt Shabd Journal, Volume XII, Issue VI, JUNE/2023, ISSN NO : 2347-3150

### **International Conference Paper Publications**

Senthilnayaki, B, Venkatalakshmi, K & Kannan, A, 'An Intelligent Intrusion Detection using Genetic based Feature Selection and Modified J48 Decision Tree Classifier', Fifth IEEE International Conference on Advanced Computing, pp. 1-7, 2013.

Senthilnayaki, B, Venkatalakshmi, K & Kannan, A, 'Intrusion Detection using Optimal Genetic Feature Selection and SVM based Classifier', 2015 Third IEEE International

Conference on Signal Processing, Communication and Networking, pp.1-4, 2015.

Senthilnayaki B, Narashiman D, Mahalakshmi G, Julie Therese M , Devi A, Dharanyadevi P, "Crop Yield Management System Using Machine Learning Techniques," 2021 IEEE International Conference on Mobile Networks and Wireless Communications, pp. 1-5, 2021.

Senthilnayaki B, Mahalakshmi G, Uma E, Devi A, Rajeswary C and Dharanyadevi P, "Trust Score Evaluation Scheme for Secure Routing in VANET," 2021 IEEE International Conference on Mobile Networks and Wireless Communications, pp. 1-6, 2021.

B. Senthilnayaki, C. Rajeswary, G. Nivetha, P. Dharanyadevi, G. Mahalakshmi and A. Devi, "Traffic Sign Prediction and Classification Using Image Processing Techniques," 2022 International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN), 2022, pp. 1-5, doi: 10.1109/ICSTSN53084.2022.9761286.

B. Senthilnayaki, K. Venkatalakshmi, P. Dharanyadevi, N. G and A. Devi, "An Efficient Medical Image Encryption Using Magic Square and PSO," 2022 International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN), 2022, pp. 1-5, doi: 10.1109/ICSTSN53084.2022.9761299.

Devi, G. Kavya, K. Santhanalakshmi and B. Senthilnayaki, "ICT Assesment Techniques and Tools for Screening Specific Learning Disabilities," 2022 5th International Conference on Advances in Science and Technology (ICAST), Mumbai, India, 2022, pp. 174-179, doi: 10.1109/ICAST55766.2022.10039596.

Senthilnayaki, N. Saraswathi, V. Sathiyavathi, M. S. Priya and L. SaiRamesh, "Classification of Natural Disasters Using Decision Tree Techniques," 2023 12th International Conference on Advanced Computing (ICoAC), Chennai, India, 2023, pp. 1-5, doi: 10.1109/ICoAC59537.2023.10249871

Senthilnayaki B, Implementation of IoT based E-Glove Health Care System for Elderly Peoples, Devi A, Dhivya K, Srivani C, Senthilnayaki , Dharanyadevi P, Octobot for Child Rescue from Open Bore Well, 3rd international Confernce on Smart Technologies, Communication and Robotics, 09-10 ,2023

Senthilnayaki B, Edali Jasmine Cleticia I & Kannan A, 'Key Based Spatio-Temporal Access Control Model for Cloud Databases', International Conference on Advances in Industrial Engineering Applications (ICAIEA 2018), pp 30-33, 2018.

Senthilnayaki B, "Artificial Intelligence Network Security and Data Science", International Conference on Artificial Intelligence Network Security and Data Science, pp 394-398, 2020.

Julie Therese, M., Devi, A., Balaji, B., Senthilnayaki, B., Dharanyadevi, P., Rotation Scheme Based Power Consumption Analysis for Wireless Sensor Network, 1st IEEE International Conference on Smart Technologies and Systems for Next Generation Computing, ICSTSN 2022, pp 1-5, 2022

Senthilnayaki b, Face Identification Using Eigen Faces and Artificial Neural Network, International Conference On Advances In Computer Science And Information Technology, pp 1-4, 2014.

Senthilnayaki. Balakrishnan, J. Naulegari, P. Dharanyadevi and B. Manikumar, "Book Recommendation System using Matrix Factorization with SVD," 2023 Second International Conference on Advances in Computational Intelligence and Communication (ICACIC), Puducherry, India, 2023, pp. 1-5

A. Devi, K. Dhivya, C. Srivani, B. Senthilnayaki and P. Dharanyadevi, "Octobot for Child Rescue from Open Bore Well," 2023 Third International Conference on Smart Technologies, Communication and Robotics (STCR), Sathyamangalam, India, 2023, pp. 1-5.

Senthilnayaki Balakrishnan, J. Naulegari, A. D. M, D. P and N. D, "Digital Currency Fees Payment Portal Using Blockchain Technology," 2023 International Conference on System, Computation, Automation and Networking (ICSCAN), PUDUCHERRY, India, 2023, pp. 1-6.

B. Senthilnayaki, M. A. Devi, S. A. Roseline and P. Dharanyadevi, "Deep Learning-Based Fire and Smoke Detection System," 2024 Second International Conference on Emerging Trends in Information Technology and Engineering (ICETITE), Vellore, India, 2024, pp. 1-6.

B. Senthilnayaki, M. A. Devi, S. A. Roseline and P. Dharanyadevi, "Deep Learning-Based Fire and Smoke

Detection System," 2024 Second International Conference on Emerging Trends in Information Technology and Engineering (ICETITE), Vellore, India, 2024, pp. 1-6.

B. Senthilnayaki, M. Rajeswari, M. S. Thangam and K. R. Premlatha, "Detection of Facemask and Social Distance Using Deep Learning Algorithm," 2024 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), Chennai, India, 2024, pp. 1-7.

B. Priya Dharshini, A. Saranya and B. Senthilnayaki, "Integrating Machine Learning and Epidemiological Data to Forecast Zoonotic Disease Outbreaks from Avian Influenza and Other Animal," 2024 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), Chennai, India, 2024, pp. 1-5.

### **National Conference Paper Publications**

Senthilnayaki B, Venkatalakshmi K & Vidhya Sri, 'Detection of Lung Cancer from CT Lung Images using Optimization Algorithm', National Conference on Research Advances in Smart Computing and Communication Systems (NCRSCCS'17), pp-205-217, 2017.

Senthilnayaki B, Jegatha Deborah L, Baskaran R & Kannan A, 'Similarity Measurement Technique for Ontology Construction in Intelligent Web Based e-Learning', National Conference on Advanced Pattern Mining and Multimedia Computing (APMMC 2010), pp 695-699, 2010.

Senthilnayaki B, 2013, 'Electricity Forecasting using Pattern Matching Technique', National Conference on Architecture, software systems and green Computing 2013 (NCASC 2013), pp.1-5, 2013.

Senthilnayaki B, Edali Jasmine Cleticia I & Kannan A, 'Securing used Authentication Techniques for Communications in Social Media' National Conference on Gender and the Media: Challenges and Opportunities NCGM'18 2018.

### **Book Chapters**

P Dharanyadevi, J Therese M, B Senthilnayaki, A Devi, K Venkatalakshmi, " Cram on data recovery and backup cloud computing techniques", Intelligent Network Design Driven by Big Data Analytics, IoT, AI and Cloud Computing,

[https://doi.org/10.1049/PBPC054E\\_ch6](https://doi.org/10.1049/PBPC054E_ch6)

Senthilnayaki et al., Dharanyadevi, P., R. Sri Saipriya, T. C. Adityaa, B., M. Julie Therese, A. Devi, and K. Venkatalakshmi. "A detailed cram on artificial intelligence industrial systems 4.0." In Advances in Cyber Security and Intelligent Analytics, pp. 189-206. CRC Press, 2022.

<b>Patent Publication</b>	:	3
<b>Honors &amp; Awards</b>	:	
<b>FDP &amp; Workshop Attended Details</b>	:	33
<b>Professional Membership</b>	:	IEEE and IAENG
<b>LinkedIn ID</b>	:	
<b>Google Scholar ID</b>	:	QpknulAAAAAJ
<b>Scopus ID</b>	:	56419870200
<b>Web of Science ID</b>	:	AAZ-4015-2021
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