Faculty Profile

Dr. P.SUNDARAVADIVEL , M.E., Ph.D
Associate Professor / AIML

HIGHLIGHTS:

- Number of Journal Publications: 20
- H-Index: 4
- Project Funding Received: NIL
- Patents Published: 2
- Patents Granted: NIL

PROFESSIONAL LINKS:

- Scopus ID: 57204391586
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=57204391586
- Google Scholar ID: https://scholar.google.com/citations?user=KxEBnc4AAAAJ&hl=en
- Anna University Faculty ID: 9123203
- AICTE Faculty ID: 1-3552774428
- Anna University Supervisor ID: NIL
- LinkedIn: NIL

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 19 Years
- Industrial Experience: NIL

AREA OF SPECIALIZATION:

- Data Mining
- Wireless Network
- Antenna and Communication System

PATENTS PUBLISHED/GRANTED:

1. Multi-Layered Cybersecurity Framework Using Machine Learning Algorithms", Application No.202441027153 A, Published on 12.04.2024. Patent Application Publication India

2. Generative Adversarial Network (Gan)-Based Synthetic Data Generation For Privacy Preserving Machine Learning, ", Application No.202441056350 A, Published On 02.08.2024 Patent Application Publication India.

COURSES CERTIFIED:

- **CCNA**

PUBLICATION:

- **T. S. Akhila;X. Arogya Presskila;P. Kalyanakumar;R. Santhana Krishnan;M. SahanaPreethi;P. Sundaravadivel** Optimizing the Shopping Experience Through Smart Trolleys with Integrated Deep Learning Techniques**, SCOPUS Journal,IEEE Xplore, October 2024. ISSN:978–80–7043–987–6,Published:21-August-2024 DOI:**

- **P. Sundaravadivel, D. Rajesh Kumar, Yuvaraj Padmanaban & Om Prakash Kumar ,** A versatile conformal circularly polarized quad-element antenna for X-band applications, SCI, SCOPUS, WOS, UGC, AU ANNEXURE, Scientific Reports, October 2024. ISSN: 2045-2322, Published: 21 August 2024 ,DOI: [Insert DOI]

- **P. Sundaravadivel;J. Relin Francis Raj;S. Senthil Kumar;R. Santhana Krishnan;A. Essaki Muthu;M. Saravana Karthikeyan** , Dynamic Playlist Recommendations based on Multi-Modal Mood Detection and Contextual Learning**, SCOPUS Journal, IEEE, December 2024. ISSN:979-8-3503-7642-5,Published:21-August-2024**

- **P. Hemavathy, M. Sangeetha Priya, P. Sundaravadivel, E. S. Vinothkumar & K. Suresh Kumar** Harnessing AI Mining Methodologies to Anticipate the Probability of Gestational Diabetes Mellitus Occurrence, SCI, SCOPUS, WOS, UGC, AU ANNEXURE, Lecture Notes in Networks and Systems,December-2024,ISSN:2367-3370, Published: 21 August 2024

- **P. Sundaravadivel, M. Ramkumar Raja, C. Annadurai & D. Rajesh Kumar** A novel moon-shaped flexible four-element co-planar antenna for 5G application**s**, SCI, SCOPUS, WOS, UGC, AU ANNEXURE, Optical and Quantum Electronics, December 2024. ISSN:0306-8919,Published:21-August-2024,DOI: https://doi.org/10.1007/s11082-024-07326-2

- **P Sundaravadivel, D Rajesh Kumar, V Prithivirajan and K Anish Pon Yamini," A four-element metasurface loaded high gain MIMO antenna for X-band applications "** Published 21 August 2024 • © 2024 IOP Publishing Ltd. All rights, including for text and data mining, AI training, and similar technologies, are reserved. Physica Scripta, Volume 99, Number 9 , *Phys. Scr.* 99 095530DOI 10.1088/1402-4896/ad6d10

- P. Hemavathy, Haitham Alhaji, D.Yuvaraj, **P.Sundaravadivel,** Saif Saad Alnuaimi, R.Augustian Isaac, " CNN based Smart Activity Recognition for Elderly and Physically Disabled" Journal of Electrical System, 2024, Volume no 23, Issue no 3s. **DOI: https://doi.org/10.52783/jes.1284.**

- P.Senthilpandian**, P.Sundaravadivel,** R.Augustian Isaac, P.Hemavathy, E.S.Vinothkumar, P.Janaki Ramal "Analysing Iot Smart System Application And Environment By Using Simulated Annealing Techniques" ,Journal of Theoretical and Applied Information Technology, Volume no 102 Issue No 8.

- E. S. Vinothkumar, P. Hemavathy, Najeem Dheen Abdul Majeeth,V. Ramachandran**, P. Sundaravadivel,** R. Augustian Isaac, " Classification of Glaucoma Image Using Supervised Classifiers and Segmentation of Blood Vessel" International Journal of Intelligent Systems and Applications in Engineering (IJISAE), Volume 12 Issue no 3, Page 499 – 507

- R. Augustian Isaac**, P. Sundaravadivel,** D. Yuvaraj, P. Hemavathy, P. Janaki Ramal, P. Sankar, " Design of Domestic Plants Leaves Disease Detection Using Deep Learning" International Journal of Intelligent Systems and Applications in Engineering (IJISAE), Volume 12 Issue no 20, Page 755 – 764.

- P. Senthil Pandian, **P. Sundaravadivel,** E. S. Vinothkumar, P. Janaki Ramal, " Monitoring the Sequence Recovery in Bitcoin Using Convolutional Neural Network and Long Short-Term Model to Hybrid Model"

International Journal of Intelligent Systems and Applications in Engineering (IJISAE), Volume 12 Issue no 20 , Page 765 - 772

- **P. Sundaravadivel,** B. Karthika, Y. Harold Robinson, R. Santhana Krishnan, L. Rachel, S. Sundararajan, An Intelligent IoT-Driven Smart Shopping Cart with Reinforcement Learning for Optimized Store Navigation, 2023 International Conference on Emerging Research in Computational Science (ICERCS) | 979-8-3503-5976-3/23/$31.00 ©2023 IEEE | DOI: 10.1109/ICERCS57948.2023.1043426

- **P. SundaraVadivel**, R. Augustian Isaac, P. Senthil Pandian, D. Rajesh Kumar **, "**A Very Compact and Highly Decoupled Four Element Antenna for n79 Band Application" International Journal Of Microwave And Optical Technology, , Vol 19 , No1, 2024 PP 99-108.

- Alnuaimi, S. S. ., Rasheed, B. H. ., Yuvaraj, D. **., Sundaravadivel, P. &** Isaac, R. A. . (2024). Hybrid Deep Learning Techniques for Large-Scale Video Classification. International Journal of Intelligent Systems and Applications in Engineering, 12(15s), 78–86. https://ijisae.org/index.php/IJISAE/article/view/4717

- Vallileka, N**., Sundaravadivel, P**., Karthikeyan, U., ...Narayanan, K.L., Sundararajan, S. "DeepTweet: Leveraging Transformer-based Models for Enhanced Fake News Detection in Twitter Sentiment Analysis", *7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), I-SMAC 2023 - Proceedings*, 2023, pp. 438–443

- S.Navaneetha Krishnan, **P.Sundaravadivel,** D.Yuvaraj**,** Enhanced Route Optimization for Wireless Netwroks using Meta – Heuristic Engineering, Computer Systems Science and Engineering, Tech Science Press, Vol 43 , No1, 2022 PP 17-26. Doi:10.32604/csse.2022.021590

- D.Yuvaraj,S.Shanmugapriya, Subbiah Swaminathan**, Sundaravadivel.P**, Prioritization of Medical Data Transmision over IOT Envirinment, IEEE , 2022.

- D.Yuvaraj, S.Shanmugapriya, **Sundaravadivel. P** , Secure Key Management Based Mobile Authentication in Cloud, Computer Systems Science and Engineering, Tech Science Press, Vol 43 , No3, 2022 PP 887-896. Doi:10.32604/csse.2022.021845.

- S.Nageswari **Dr.P.Sundara vadivel**, "IOT Based Automatic Dual Axis Sun Tracking and Intimation System", International Journal of Emerging Technology and Innovative Engineering, Volume 5, Issue 4, April 2019.

- **Sundaravadivel. P ,** Yuvaraj .D, Dr.M. Sivaram, S.Nithya**,** 2019 "Intelligent based IOT Smart City on Traffic Control System Using Raspberry Pi and Robust Waste Management",
- Journal of Advanced Research in Dynamical & Control Systems, Vol. 10, 14-Special Issue, 2018.

- **Sundaravadivel. P ,**Navaneetha Krishnan.S , Yuvaraj .D 2018, 'An Efficient CBIR System Based on Colour Histogram, Edge and Texture Features, **Concurrency and Computation Practice and Experience** , Online DOI:10.1002/cpe.4994.

- **Sundaravadivel. P** ,Navaneetha Krishnan.S , Yuvaraj .D "An Effective Document Category Prediction System Using Support Vector Machines, Mann-Whitney Techniques", International Journal of Pure and Applied Mathematics, Volume 118 No. 22 2018, 895-900. ISSN: 1314-3395.

- **Sundaravadivel, P** & Senthamaraikannan, S 2016, 'Effective feature reduction for health care data set using hybridized feature selector', Asian Journal of Research in Social Science and Humanities, Online ISSN 2249-7315 Year 2016, vol. 6, no. 5, pp. 443-457.

- **Sundaravadivel, P,** Senthamaraikannan, S & Divagar, B 2015, 'High performance multicast turing machine', International Journal of Applied Engineering Research, ISSN 0973-4562, (2015) Research India Publications, vol. 10, no. 55.

- Senthamarai Kannan, **S,** Sherin Mariam John, **Sundaravadivel, P** & Ilangovan, S, 'Performance evaluation of classification algorithms C4.5 and SMO on microarray gene-set data', International Journal of Research in Engineering and Technology (IJRET),

- **Sundaravadivel P,** Senthilkumar J & Sudharsanan, M, 'Cluster-based intrusion detection technique for wireless networks', International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169, vol. 2, no. 1, pp. 80-87.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- **Dynamic Playlist Recommendations Based on Multi-Modal Mood Detection and Contextual Learning**, 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), 5 October 2024.

- **Optimizing the Shopping Experience through Smart Trolleys with Integrated Deep Learning Techniques**, International Conference at Pokhara University, 15 October 2024.

- **Adaptive Movie Recommendations: A Deep Learning Framework with Mood and Sentiment Integration**, International Conference at Bharath Niketan Engineering College, 11 December 2024.

- **'Empirical study on feature subset selection and feature ranking methods'**, First International conference on Science Engineering and Computer Technology, Vedavyasa Institute of Technology, Calicut, Kerala.

- **'High performance multicast turing machine'**, ICAAET'15 International Conference on Advances in Applied Engineering and Technology - 2015 organized by Syed Ammal Engineering College, May 14-16, 2015.

- **'A novel document category prediction system using support vector machines and mann-whitney rank sum statistic'**, International Conference on Recent Advances in Engineering, Science & Technology – ICON'15"- on April 17 2015, organized by Department of Biomedical Engineering, Noorul Islam Centre For Higher Education Kumaracoil.

- **Duplicate Elimination in Web Databases by Active Learning Approach,**PSRC 2013 International Conference Program- Kuala Lumpur August 25-26, 2013, Organized by Planetary Scientific Research Centre(PSRC).

- **Performance Evaluation of Classification Algorithms C4.5 and SMO On Microarray Gene-set Data,** PSRC 2012 International Conference Program- Pattaya (Thailand) July 20-21, 2013, Organized by Planetary Scientific Research Centre(PSRC).

- **A Novel Information Gain-Bayes Theorem Based Hybrid Feature Selection Approach For Improved Classifier Accuracy,** 2nd National Conference on Frontiers in Applied Sciences and Computer Technology (FACT' 13), May 23-24, 2013 Organized by National Institute of Technology, Thiruchirappalli.

- **Intrusion Detection using Multi Sensing Techniques in Wireless Sensor Networks,** National Conference on Emerging Trends in Computing and Network Technologies (ECNT 09) March 19-20, 2009, Organized by K.L.N College of Information and Technology, Madurai.

- **Intrusion Detection using Multi Sensing Techniques in Homogeneous and Heterogeneous Wireless Sensor Networks,** 2nd National Conference on Intelligent Computing and Automation – (INSTRUVISION 2009) March 13,2009, Organized by Kamaraj College of Engineering and Technology, Viruthunagar.

- **Intrusion Detection using Multi Sensing Techniques in Wireless Sensor Networks,** National Conference on Information, Communication and Electrical Technologies on (ICET 2009) February 27-28, 2009, Organized by Velammal College of Engineering and Technology, Madurai.

- **National Seminar on Emerging Trends in Computer Applications, Bharath Niketan Engineering College, Aundipatti, February 08, 2013.**

- **National Conference on Computing and Communication, Dr.Mahalingam College of Engineering and Technology, Pollachi, September 15-16, 2006.**

- **Faculty Development Program, Bharath Niketan Engineering College, Aundipatti, Organized by National Institute of Technical Teacher Training and Research Institute, Chennai, August 2008.**

- **Implant Training as a Programmer Trainee by National Institute of Technical Teachers Training and Research Institute at Chennai, June-August 2004.**

- **Participated in the Seminar on Intellectual Property Rights and Copyrights Organized by Technology gateway, Anna University, Chennai.**

- **Participated in 7 Days NSS Programme Officer Orientation program at Avainasilingam University, Coimbatore on from 14.02.2014 to 20.02.2014 .**