

Faculty Details for Department Website

Name: Mr. Manikandan J

Degree: M.Tech

Designation: Assistant Professor

Experience: 4 years 5 months

Area of Specialization: Artificial Intelligence, Machine learning, Natural Language Processing

Contact (Email id): manikandanj@stjosephs.ac.in

Subjects Handled:

Artificial Intelligence

Big data analytics

Deep learning techniques

Data Structures

Problem Solving and Python Programming

PAPER PUBLICATION

SCI Publication

1. Devi, G. Dharani, Neeraj Kumar, **J. Manikandan**, and V. Rekha. "Innovative brain tumor detection: Stacked random support vector-based hybrid gazelle coati algorithm." *Biomedical Signal Processing and Control* 101 (2025): 107156.
2. **Manikandan, J.**, and K. Jayashree. "Enhancing Lung Nodule Classification: A Novel CViEBi-CBGWO Approach with Integrated Image Preprocessing." *Journal of imaging informatics in medicine* (2024). **Impact factor: 4.2.**
3. Selvakanmani, S., P. Rajeswari, B. V. Krishna, and **J. Manikandan**. "Optimizing E-waste management: Deep learning classifiers for effective planning." *Journal of Cleaner Production* 443 (2024): 141021. **Impact factor: 9.7.**
4. Samuel, Prithi, and Brahmadesam Viswanathan Krishna, **Manikandan J.** "Exploration of sentiment analysis in twitter propaganda: a deep dive." *Multimedia Tools and Applications* 83, no. 15 (2024): 44729-44751. Impact factor: **Impact factor:3.0.**

Conference Publication (Scopus Indexed)

1. Nilaiswariya, R., **J. Manikandan**, and P. Hemalatha. "Improving Scalability And Security Medical Dataset Using Recurrent Neural Network And Blockchain Technology." In 2021 International Conference on System, Computation, Automation and Networking (ICSCAN), pp. 1-6. IEEE, 2021.

2. Sriram, S., **J. Manikandan**, P. Hemalatha, and G. Leema Roselin. "A Chatbot Mobile Quarantine App for Stress Relief." In 2021 International Conference on System, Computation, Automation and Networking (ICSCAN), pp. 1-5. IEEE, 2021.
3. Leema, Roselin G., K. Kiruba, P. Hemalatha, **J. Manikandan**, M. Madhin, and Raj S. Mohan. "Revolutionizing Secure Commercialization In Agriculture Using Blockchain Technology." In 2021 International Conference on System, Computation, Automation and Networking (ICSCAN), pp. 1-6. IEEE, 2021.
4. **Manikandan, J.**, Brahmadesam Viswanathan Krishna, and K. Surendar. "Sign Language Recognition using Machine Learning." In 2022 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), pp. 1-5. IEEE, 2022.
5. Akshaya, D., Charanappradhosh, and **J. Manikandan**. "Social Distance Monitoring Framework Using YOLO V5 Deep Architecture." In Proceedings of International Conference on Recent Trends in Computing: ICRTC 2022, pp. 703-712. Singapore: Springer Nature Singapore, 2023.
6. **Manikandan, J.**, Brahmadesam Viswanathan Krishna, N. Varun, V. Vishal, and S. Yugant. "Automated Framework for Effective Identification of Oral Cancer Using Improved Convolutional Neural Network." In 2023 Eighth International Conference on Science Technology Engineering and Mathematics (ICONSTEM), pp. 1-7. IEEE, 2023.
7. **Manikandan, J.**, and R. Yogeshkumar. "Glaucoma Disease Detection Using Hybrid Deep Learning Model." In 2023 Eighth International Conference on Science Technology Engineering and Mathematics (ICONSTEM), pp. 1-7. IEEE, 2023.
8. Pournima, S., C. Priyatharsini, G. Kirubasri, and **J. Manikandan**. "Hybrid BILSTM Network for Improving Crop Pest Classification." In 2023 International Conference on Computer Communication and Informatics (ICCCI), pp. 1-5. IEEE, 2023.
9. **Manikandan, J.**, S. Adolphine Shyni, R. Dhanalakshmi, S. V. Akshaya, and S. Dharshini. "Segmentation and Detection of Pneumothorax using Deep Learning." In 2023 7th International Conference on Intelligent Computing and Control Systems (ICICCS), pp. 468-473. IEEE, 2023.
10. **Manikandan, J.**, Sterlin Rani Devakadacham, M. Shanthalakshmi, Y. Arockia Raj, and K. Vijay. "An Efficient Technique for the Better Recognition of Oral Cancer using Support Vector Machine." In 2023 7th International Conference on Intelligent Computing and Control Systems (ICICCS), pp. 1252-1257. IEEE, 2023.
11. **Manikandan, J.**, Brahmadesam Viswanathan Krishna, C. Sasivarma, R. Yogesh Kumar, and M. Sidharth Raj. "Cataract Fundus Image Detection Using Hybrid Deep Learning Model." In *International Conference on Computational Intelligence in Data Science*, pp. 300-313. Cham: Springer Nature Switzerland, 2023.
12. Santhiya, M., Sindhuja, M., Jegatha, R. and **Manikandan, J.**, 2023, August. An Effective Automated Framework for Oral Cancer Detection by Enhanced Convolutional Neural Networks. In 2023 12th International Conference on Advanced Computing (ICoAC) (pp. 1-7). IEEE.
13. Sugunedham, S. K., M. Rajeswari, S. Anandhi, and **J. Manikandan**. "Fruits and Pest Diseases Detection using Deep Learning-Based Approach." In 2023 International Conference on System, Computation, Automation and Networking (ICSCAN), pp. 1-5. IEEE, 2023.
14. Krishna, B. V., G. Dharani Devi, V. Sumathy, and **J. Manikandan**. "An Improved Music genre classification using Convolutional Neural Network and Spectrograms." In 2023 International Conference on System, Computation, Automation and Networking (ICSCAN), pp. 1-6. IEEE, 2023.

15. Devi, Dharani, Sterlin Rani Devakadacham, D. Saveetha, and **J. Manikandan**. "Enhancing Insect Species Identification in Agriculture using Fusion BiLSTM Network and VGG-16 CNN Architecture." In *2024 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI)*, pp. 1-6. IEEE, 2024.
16. Anandhi, S., Sterlin Rani Devakadacham, **J. Manikandan**, and M. Shanthalakshmi. "Enhancing Lung Disease Diagnosis through Meta Learning: A Framework Utilizing Few-Shot Learning Techniques." In *2024 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI)*, pp. 1-6. IEEE, 2024.

Google Scholar Publication

1. Hemalatha, P., **J. Manikandan**, G. Leemarosilin, and P. Kanimozhi. "Sea Food Processing Using Internet of Things and Cloud Technologies." *PalArch's Journal of Archaeology of Egypt/Egyptology* 17, no. 9 (2020): 5877-5885.
2. Vijay, K., **J. Manikandan**, Babu Rajendiran, K. R. Sowmia, and Eugene I. Berna. "Deep Dive on Oversampling and Under Sampling Techniques in Machine Learning." In *Recent Trends in Computational Intelligence and Its Application*, pp. 423-430. crc Press, 2023.

Book Chapter (Scopus Indexed)

1. Manikandan, J., K. Rhikshitha, G. S. Sathya Sudarsen, and J. U. Saran. "A Comprehensive Study on Machine Vision Techniques for an Automatic Weeding Strategy in Plantations." *Computer Vision in Smart Agriculture and Crop Management* (2025): 303-321.
2. Manikandan, J., J. U. Saran, S. Samitha, and K. Rhikshitha. "An Effective Study on the Machine Vision-Based Automatic Control and Monitoring in Furrow Irrigation and Precision Irrigation." *Computer Vision in Smart Agriculture and Crop Management* (2025): 323-342.

RESOURCE PERSON

- Delivered a lecture on “**Machine learning and its real time application**” as a resource person organized by the Centre of Excellence in Data Science in association with Rajalakshmi Engineering College.
- Delivered a Guest lecture on the topic of “**Machine learning algorithms and its application**” on Panimalar Engineering College, Chennai.
- Delivered a Guest lecture on the topic of “**Hands-on Session on Machine learning algorithms**” at Panimalar Engineering College, Chennai.

Google Scholar ID: <https://scholar.google.com/citations?user=w2eXOegAAAAJ&hl=en>

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=57210765037>

WOS researcher ID: <https://www.webofscience.com/wos/author/record/JMC-2923-2023>