# WALCHAND INSTITUTE OF TECHNOLOGY, SOLAPUR
## *(An Autonomous Institute)*

## Electronics Engineering

## Faculty Publications

## AY 2023-24

| Name of Authors | Title of Research Publication | Name of Journal / Conference |
|---|---|---|
| Dr. S. R. Gengaje et al | Design of Secure Data Sharing and Authorized Searchable Framework for e-Healthcare System | International Research Journal of Modernization in Engineering Technology and Science Volume:06, Issue:05. e-ISSN: 2582-5208. June-2024 |
| Dr. S. R. Gengaje & Mr. PDR Patnaik | A Systematic Review of Hardware-in-the-Loop (HIL) Framework for Internet of Things Applications | Grenze International Journal of Engineering & Technology (GIJET), 2024, Vol 10, Issue 1, p1120. Jan 2024 |
| Dr. S. R. Gengaje et al. | Design of Secure Authenticated Key Management Protocol for Cloud Computing Environment | International Research Journal of Modernization in Engineering Technology and Science Volume:06, Issue:05. e-ISSN: 2582-5208. May-2024 |
| Mr. R. S. Khamitkar & Dr. R. R. Dube | Performance Evaluation of Hardware Trojan in SoC with Custom Overlay | IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation, Volume 2, Pages 1-6. May 2024 |
| Mrs. M.N. Shrigandhi & Dr. S.R. Gengaje | Systematic Literature Review on Object Detection Methods at Construction sites | Expert Clouds and Applications. ICOECA. Lecture Notes in Networks and Systems, vol 673. Springer, Singapore. ISBN 978-981-99-1745-7. July 2023 |
| Mrs. M. N. Shrigandhi et al. | Performance Analysis of American Sign Language Using Wavelet Transform and CNNs | Intelligent Systems and Sustainable Computing. ICISSC. Smart Innovation, Systems and Technologies, vol 363. Springer, Singapore. ISBN 978-981-99-4717-1. October 2023 |
| Dr. Mrs. R.J. Shelke & Ms. S. G. Teli | Underwater Image Enhancements Using CNN And U-Net | Journal of Emerging Technologies and Innovative |

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| | | Research. Volume 10, Issue 7, Pages 243-248. Feb 2024 |
| Dr. R.J. Shelke, Dr. R. R. Mergu & Ms. P. B. Patil | Smart Door Opening System Using CNN | Intelligent Systems and Sustainable Computing. ICISSC. Smart Innovation, Systems and Technologies, vol 363. Springer, Singapore. ISBN 978-981-99-4717-1. October 2023 |
| Dr. R. J. Shelke et al. | Speech Emotion Recognition Using Machine Learning | ICT Systems and Sustainability. Lecture Notes in Networks and Systems, vol 765. Springer, Singapore. ISBN 978-981-99-5652-4 November 2023. |
| Mr. A. S. Gundale & Dr. V. M. Meshram | WeaveSense: IoT Infrastructure for Rapier Loom Condition Monitoring and Analysis | SSRG International Journal of Electrical and Electronics Engineering Volume 10 Issue 12, 27-36, ISSN: 2348-8379. December 2023 |
| Mr. A. S. Gundale & Ms. K. R. Gavali | Water Quality Evaluation using Machine Learning Techniques | International Journal of Innovative Research in Technology, Volume 10, Issue 2 ISSN: 2349-6002, July 2023. |
| Mr. A. S. Gundale & Ms. S. G. Tatikonda | A Soil Quality detection and Crop Management System Using IOT | International Journal of Innovative Research in Technology. Volume 10, Issue 2 ISSN: 2349-6002, July 2023. |
| Mrs. D. P. Wadkar et al. | UV-C Enhanced Automatic Sanitization Robot | International Journal of Creative Research Thoughts. Volume 12, Issue 5. ISSN: 2320-2882. May 2024 |
| Mrs. P. V. Katare et al. | Royal Bites Restaurant Website | International Research Journal of Modernization in Engineering Technology and Science Volume:06, Issue:05. e-ISSN: 2582-5208. May-2024 |

# AY 2022-23

| Name of Authors | Title of Research Publications | Name of Journal / Conference |
|---|---|---|
| Dr. R.J. Shelke & Ms. P. B. Patil | Smart Face Mask Detection using Convolutional Neural Network. | Journal of Emerging Technologies and Innovative Research(JETIR), ISSN-2349-5162,Volume 9, Issue 12, December , 2022 |
| Mr. A. S. Gundale & Dr. V. M. Meshram | Early Failure Detection of Rapier Weaving Loom using Sensors and Machine Learning Approach | Mathematical Statistician and Engineering Applications, ISSN: 2886-2881, Vol. 71, Issue 4, August 2022 |
| Dr. S. R. Gengaje & Ms. R. K. Gundla | Review on Android Malware Detection System | Lecture Notes on Data Engineering and Communications Technologies book series (LNDECT), Springer Publication, Electronic ISSN 2367-4520, Print ISSN 2367-4512, Volume: 137, 'September 2022 |
| Dr. S. R. Gengaje & Mrs. M. N. Shrigandhi | Systematic Literature Review on Object Detection Methods at Construction sites | 'Lecture Notes in Networks and Systems' Book Series LNNS, Springer eBook, Volume: 673, 709-724, July 2023 |
| Mr. R. S. Khamitkar & Dr. R. R. Dube | Performance Evaluation of Hardware Trojan using FPGA | 'Lecture Notes in Electrical Engineering' book series LNEE, Springer eBook, Volume 992, May 2023 |
| Dr. S. R. Gengaje & Mr. B. R. Solunke | A Review on Traditional and Deep Learning based Object Detection Methods | 5th IEEE International Conference on "Emerging Smart Computing & Informatics" (IEEE ESCI-2023), 1-3 March 2023 |
| Dr. S. R. Gengaje & Ms. R. K. Gundla | Review on Android Malware Detection System | International Conference on Data Management, Analytics & Innovation ICDMAI 2022, 14-16 January |
| Dr. S. R. Gengaje & Mrs. M. N. Shrigandhi | Systematic Literature Review on Object Detection Methods at Construction Sites | International Conference on Expert Clouds and Applications (ICOECA-2023), 9th & 10th Feb 2023 |

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| Dr. S.R. Gengaje & Mr. B. R. Solunke | YOLOv7: A General Framework of Real-Time Multi-Objects Detection For Advanced Driving Assistant | National Conference on AI for decision Making, 9th – 10th March 2023 |
| Dr. S.R. Gengaje & Ms. R. K. Gundla | Android Malware Detection using Machine Learning | National Conference on AI for decision Making, 9th – 10th March 2023 |
| Dr. R.J. Shelke & Ms. P. B. Patil | Automatic Door Opening System using CNN | 4th International Conference "Techno-Societal 2022" on "Advanced Technologies for Societal Applications", 9th - 10th December 2022 |
| Dr. R.J. Shelke, Dr. R. R. Mergu & Ms. P. B. Patil | Smart Door Opening System using CNN | International Conference on Intelligent Systems & Sustainable Computing (ICISSC-2022), December 16-17, 2022 |
| Dr. R.J. Shelke & Ms. P. B. Patil | Real-Time Face Recognition for Biometric Attendance Using Convolutional Neural Network | National Conference on AI for decision Making, 9th – 10th March 2023 |
| Dr. R.J. Shelke & Ms. K. R. Gavali | Analysis of Water Quality using Machine Learning | National Conference on AI for decision Making, 9th – 10th March 2023 |
| Dr. R.J. Shelke & Ms. S. G. Teli | Review on underwater Image Enhancement using CNN | National Conference on AI for decision Making, 9th – 10th March 2023 |
| Mrs. M. N. Shrigandhi et al. | Performance analysis of American sign language recognition using Wavelet transform and Convolutional Neural Network (CNN) | International Conference on Intelligent Systems & Sustainable Computing (ICISSC-2022), December 16-17, 2022 |
| Mrs. M. N. Shrigandhi & Dr. S. R. Gengaje | Detection of Excavator and Workers at Construction Site using YOLO V3 | National Conference on AI for decision Making, 9th – 10th March 2023 |
| Mr. R. S. Khamitkar & Dr. R. R. Dube | Performance Evaluation of Hardware Trojan using FPGA | 7th International Conference on Micro-ectronics, Electromagnetics and Telecommunications (ICMEET 2022), July 22 - 23, 2022 |

# AY 2021-22

| Name of Authors | Title of Research Publications | Name of Journal / Conference |
|---|---|---|
| Dr. S.R. Gengaje et al. | A Theoretical Foundation for Syntactico-Semantic Pattern Recognition | IEEE Access Journal,ISSN: 2169-3536 ,Volume: 9,2021 |
| Dr. R.J. Shelke & Ms. P. B. Patil | Review on Robust Face Recognition for Biometric Attendance Using Convolution Neural Network | The International journal of analytical and experimental modal analysis, ISSN: 0886-9367, Volume13, Issue8 |
| Dr. R.J. Shelke & Ms. M. A. Dodatale | A Survey paper on FECG Extraction and Monitoring | International Research Journal of Engineering and Technology (IRJET) ISSN: 2395-0056 , Volume: 08 Issue: 12 |
| Mr. S. C. Kalshetti et al. | IOT Based Weather Monitoring System | International Journal of Research in Engineering and Science (IJRES),ISSN (Online): 2320-9364, ISSN (Print): 2320-9356, Volume 10 Issue 5 |
| Mrs. M. N. Shrigandhi et al. | Class 360: Student's Database Management System | International Journal for Science and Advance Research In Technology (IJSART), ISSN [ONLINE]: 2395-1052,Volume 8 Issue 5 |
| Mrs. M. N. Shrigandhi et al. | Attendance System Using IoT & Fingerprint Sensor | International Journal for Science and Advance Research In Technology (IJSART), ISSN [ONLINE]: 2395-1052,Volume 8 Issue 5 |

# AY 2020-21

| Name of Authors | Title of Research Publications | Name of Journal / Conference |
|---|---|---|
| Mr. A.S. Gundale & Dr. V. M. Meshram | SoA Based IoT framework for Early Detection of Sensor Failure | International Journal of Critical Reviews,Volume- 7   Issue- 15, ISSN- 2394-5125, September-2020 |
| Mr. S.C. Kalshetti et.al. | Design And Experimental Validation of Adaptive Fuzzy Sliding Mode Controller for Robotic Manipulators | Turkish Journal of Computer and Mathematics Education, ISSN: 1303-6149, Volume No.12 Issue No.13 , Pg. No. 1144-1153 |
| Mr. S. C. Kalshetti et.al | Gesture Controlled Wireless Robotic Arm | International Journal of Research in Engineering and Science, ISSN: 2581-5792, Volume No.9 Issue No. 7, Pg. No. 5-12 |
| Mrs. V. S. Patki et.al | AI based Multi-Agent online shopping system | International Research Journal of Engineering and Technology, ISSN:2395-0056, Volume No.8 Issue No. 7, Pg. No. 3032-3037 |
| Mrs. V. S. Kulkarni et. al. | Virtual Marketing: Just Scan to Shop | International Conference on Signal Processing & Communication Engineering System (SPACES-2021) |

# AY 2019-20

| Name of Authors | Title of Research Publications | Name of Journal / Conference |
|---|---|---|
| Mr. P. S. Malge & Ms. S. A. Kale | Melioration Process For Image Sharing Security And Secured Image Login | International Journal of Science & Engineering Development Research, Vol. 4, Issue 9, ISSN (Online): 2455-2631, PP-272-278, September 2019 |
| Mr. S. C. Kalshetti & Dr. S. K. Dixit | Adaptive Fuzzy Sliding Mode Controller for Robot Manipulator: Effect on External Interferences | International Journal of Innovative Technology and Exploring Engineering, Vol-9 , Issue-1, ISSN : 2278-3075, PP-5024-5031, November 2019 |
| Mr. S. C. Kalshetti & Dr. S. K. Dixit | Adaptive Fuzzy Sliding Mode Controller Design for Robot Manipulator | International Journal of Electronics Engineering, Vol-12 , Issue-1, ISSN : 0973-7383, PP-28-38, January 2020 |
| Mr. A. S. Gundale & Dr. V. M. Meshram | Framework for Early Failure Detection of Sensor | Eleventh International conference on Advances in Power Electronics & Instrumentation Engineering PEIE-2020 on 28 & 29th Feb 2020 |
| Mr. E. J. Chandane & Mrs. M. M. Pawar | DVB Transmission and Reception Using MIMO-OFDM | International Conference on Recent Innovations in Engineering Technology – 20, Vol-1, Issue 2, ISBN - 978-93-5396-746-8, January 2020 |