



Sri SAI RAM INSTITUTE OF TECHNOLOGY

An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi
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Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairamit.edu.in



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Cyber Security)



Name : **P.Rayavel**

Designation : **HoD**

Email : hodsc@sairamit.edu.in

Qualification : **M.E, (Ph.D),,**

Specialization : **CSE**

Research Interest : **Image Processing, Data Mining, Machine Learning, Cyber Security**

Experience in years : **Teaching** UG PG **Industry**

No. of Workshop/Conferences/
FDP attended : Workshop Conferences FDP

No. of Workshop/Conferences/
Hackathon Organized : Workshop Conferences Hackathon

Professional Membership	IEEE, CSI, IEI, ISTE
Publications	National :- 3
	International: 19
	Book : -
Award Received	Best Faculty Award – 2023
Achievements	Cash award for 100% result in Theory Of Computation, Artificial Intelligence, Data Analytics, Human computer interaction, Software Project Management, OOP & Data Structure and Object Oriented and System Design, Problem solving and Python Programming.



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Education Qualification:-

DEGREE	UNIVERSITY	YEAR OF PASSING	PERCENTAGE
Ph.D	Anna University	Pursuing	--
M.E	Anna university, Chennai.	2011	71%
B.E	Anna university, Chennai.	2007	73%

DST – Project:

- **Innovative projects**
- Project Title;
 - a. Smart Face Recognition and Door Unlocking System.
 - b. Rescuing Child From Deep Borewell.
- **Cost:** – Rs. 1,00,000 /-

Consultancy Project:

Company name: Icom2 Ltd, **Software:** Retail Mobile

Application Cost: – Rs. 25000 /-

- **Innovative projects**
- Project Title;
 - a. Smart Face Recognition and Door Unlocking System. **Cost:** – Rs. 1,00,000 /-



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Innovative Speaker (Resource Person)

1. FDP - Computer Society of India – Title - Machine Learning & Artificial Intelligence.
2. FDP - Kings Engineering college – Title - Future Technology: Artificial Intelligence,
3. FDP - Sathyabama University – Title - Emerging trends in Automation and e-Communication Technologies,
4. FDP - Kings Engineering college – Title - Future Technology: Cyber Security,
5. IIC Webinar - Nazareth College of Arts and Science – Title – Online tools,

PUBLICATION DETAILS

UGC	SCOPUS	WEB OF SCIENCE	SCI	TOTAL
10	7	7	3	27

COURSE COMPLETED

1. Rayavel. P, **Post Graduate Program in Cyber Security**, January 2023 at Great Lakes.

LIST OF PUBLICATIONS

1. Rayavel, P '**Comparative analysis of deep learning classifiers for diabetic retinopathy identification and detection**', The Imaging Science Journal, vol. 70, pp. 358-370, Impact Factor : 0.242, 2023.
2. Rayavel, P '**A Novel SDMFO-MBSVM-Based Segmentation and Classification Framework for Glaucoma Detection Using OCT and Fundus Images**', International Journal of Pattern Recognition and Artificial Intelligence, Vol. 36, No. 14, 2250038 (2022) vol. 70, pp. 358-370, Impact Factor : 1.261, 2023.
3. Rayavel, P '**A Novel Approach for Identification of Biomarkers in Diabetic Retinopathy Recognition**', Journal of Medical Imagine and Health Informatics, vol. 12, pp. 149-154, Impact Factor: 0.659, 2022.
4. P.Rayavel, "**Predicting the severity of blood vessel tissue damage in retinal images using support vector machine classifier**", AIP Conference Proceedings 2112, 020085 (2019); <https://doi.org/10.1063/1.7112269> Published Online: 24 June 2019



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5. P.Rayavel, **"Playing games in computers without physical interaction using electroencephalography for differently abled"**, AIP Conference Proceedings 2112, 020085 (2019); <https://doi.org/10.1063/1.5112270> Published Online: 24 June 2019
6. P.Rayavel, **"Inviolable Armament Surveillance System Using IoT for Home Safety"**, International Conference on Advances in Engineering Science Management & Technology (ICAESMT) - 2019, Uttaranchal University, Dehradun, India, by SSRN Journal in may 2019
7. P.Rayavel, **"Smart Environmental Waste Water Monitoring System and Analysis using Big Data"**, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-6, April 2019
8. P.Rayavel, **"Energy efficient light monitoring and control architecture using embedded system "**, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-7 Issue-5S2, January 2019
9. P.Rayavel, **"A Survey for Diabetic Retinopathy"**, 2018 IEEE Xplore | DOI: 10.1109/ICSNS.2018.8573667 Electronic ISBN: 978-1-5386-4552-9, Print on Demand(PoD) ISBN: 978-1-5386-4553-6.
10. P.Rayavel, **"Dynamic Traffic Control System Using Edge Detection Algorithm"**, 2018 IEEE Xplore | DOI: 10.1109/ICSNS.2018.8573683 Electronic ISBN: 978-1-5386-4552-9, Print on Demand(PoD) ISBN: 978-1-5386-4553-6.
11. P.Rayavel, **"A SURVEY FOR THYROID RETINOPATHY"**, 2018 International Journal of Pure and Applied Mathematics | DOI: Volume 119 No. 16 2018, 1527-1534 ISSN: 1314-3395.
12. P.Rayavel, **"AGRI-ADVISER"**, 2018 International Journal of Pure and Applied Mathematics | DOI: Volume 119 No. 16 2018, 1541-1549 ISSN: 1314-3395.
13. P.Rayavel, **"PREMATURE PREDICTION OF ALZHEIMER'S DISEASE USING DECISION TREE CLASSIFIER"**, 2018 International Journal of Pure and Applied Mathematics | DOI: Volume 119 No. 16 2018, 1557-1561 ISSN: 1314-3395.
14. P.Rayavel, **"Emergency Automatic Signaling System Using Time Scheduling"**, 2018 IOP: Journal Of Physics | DOI:10.1088/1742-6596/1000/1/012052.
15. P.Rayavel, **"Analysis of Extended Z-Source Inverter For Photovoltaic System"**, 2018 IOP: Journal Of Physics | DOI:10.1088/1742-6596/1000/1/012071.
16. P.Rayavel, **"Simultaneous DC and Three Phase Output Using Hybrid Converter"**, 2018 IOP: Journal Of Physics | DOI:10.1088/1742-6596/1000/1/012072.
17. P.Rayavel, **"Detection And Classification Of Animals To Alert Vehicles On Roads To Avoid Collision"**, 2017 IJCRT | Volume 5, Issue 4 December 2017 | ISSN: 2320-2882.



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18. P.Rayavel "Medical image using Digital Image Processing" has been published in AETSD - International Journal Of Multee - Disciplinary Research Volume 3, Issue 2, March - April 2017
19. P.Rayavel "Methods to Identify the flaws in the Unsupervised Clustering Methods and Their Evaluation by Analytical Study" in the International Conference ICCIT'15 held on August 13th & 14th, 2015 at Sri Sairam Institute of Technology.
20. P.Rayavel, "Noise Removal For Object Tracking Based on HSV Color Space Parameter Using CAMSHIFT", ICCOS'11 International conference on Communication and Signal Processing [ISSN-2229-3078] in Karuniya University presented on 17th and 18th Mar `11
21. P.Rayavel, "Recognise the Script using Online Handwrittern Document", 2nd National conference on Reasearch Issues In Computer Science & Engineering [ISBN-978-81-920889-0-7] in RMK Engineering College presented on 1st and 2nd March `11.
22. P.Rayavel, "CAMSHIFT Object Tracking Algorithm Based On Inter-Frame Difference For Noise Removal" ,International conference on Information Communication and Embedded Systems[ISBN-978-93-80697-65-9] (IEEE& CSI) in S A Engineering College presented on 23rd and 24th Feb `11.

List of Patent : 2

Workshop / Conferences / FDP Attended:-

1. Workshop:

1. P.Rayavel, "Major Challenges Of Medical Imaging And Big Data Analytics In Health Care And Clinical Application", ICMR sponsored national Workshop in Velammal Engineering college, 02.05.2018 to 04.05.2018.
2. P.Rayavel, "Computational Intelligence, Theories, Application and Future Direcions", International Workshop in SRM UNIVERSITY, in association with IEEE SOCIETY 11th July 2013.
3. P.Rayavel, "Mobile Computing", National Workshop in RMK Engineering College, 11th AND 12th Feb 2011.
4. P.Rayavel, "Emerging Trends in Image Processing", National Workshop in Sri Ram Engineering College, 18th August 2010.



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FDP:

1. Attended AICTE Sponsored Two Weeks Faculty Development Training Programme on "Artificial Intelligence & Advanced Machine Learning using Data Science" conducted by Dept of CSE & IT at "**S A Engineering College**" Sponsored by Anna University, Chennai between 22.11.2019 to 05.12.2019.
2. Attended five days Faculty Development Training Programme on "Tech Week" conducted by TCS at "**Sri Sairam Engineering College**" Chennai between 18.03.2019 to 22.03.2019.
3. Attended Two Weeks Faculty Development Training Programme on "Artificial Intelligence" conducted by Dept of IT at "**Saveetha Engineering College**" Sponsored by Anna University, Chennai between 19.11.2018 to 01.12.2018.
4. Attended Two days Faculty Development Program on "**Introduction to Python**" conducted by Dept of CSE at **Sri Sai Ram Institute of Technology through ICT Academy** on 29th and 30th of Sep 2018.
5. Attended One Day Faculty Development Program On "**IOT And Business 4.0**" at "**TCS, Chennai**" on 27.10.2018.
6. Attended Two days Faculty Development Program on "**Mobile Apps Development**" conducted by Dept of CSE at **Dhanalakshmi College of Engineering through ICT Academy** on 7th and 8th of March 2017.
7. Attended Ten Days Workshop On **Cloud and Automation** at "**TCS, Chennai**" from 28.12.2016 to 06.1.2017
8. Attended two Days Workshop On **Python Programming** held on Jeppiar SRR engineering college, Chennai" from 18.08.2017 to 19.08.2017
9. Attended Ten Days Faculty Development Program on "**Cloud Computing and Big Data**" conducted by Dept of CSE at **SRI SAIRAM ENGINEERING COLLEGE** on 8th and 9th December 2014.
10. Attended an IEEE sponsored workshop on "**Emerging Trends and Future Perspective in Image Processing and Computer Vision**" by Sri Sairam Engineering College.
11. **P.Rayavel, "Semantic Web-Applications and Applied Image Processing"**, held in Third IEEE International Conference On Signal & Image Processing Organized by RMD Engineering College, 15th – 17th Dec 2010.
12. Attended faculty Enablement Program on "**A step to outcome based Accreditation**" at **Sri Sairam Institute of Technology** on 4th April 2015.



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13. **P.Rayavel, "Advanced Web Technologies"**, Organized by *Sona College of Technology, Salem* in April 30th – May 12th 2012.
14. **P.Rayavel, "Research issues in Computational Grid and Cloud Computing"**, Organized by *Kongu Engineering College, May 25th – June 7th 2012.*
15. **P.Rayavel, "CAMPUS CONNECT PROGRAM ON INFOSYS"**, FDP Program in Kamaraj College of Engineering, at 27th Sep to 30th Sep 2012.

Conference:

1. P.Rayavel, "**Predicting the severity of blood vessel tissue damage in retinal images using support vector machine classifier**", AIP Conference Proceedings 2112, 020085 (2019); <https://doi.org/10.1063/1.7112269> Published Online: 24 June 2019
2. P.Rayavel, "**Playing games in computers without physical interaction using electroencephalography for differently abled**", AIP Conference Proceedings 2112, 020085 (2019); <https://doi.org/10.1063/1.5112270> Published Online: 24 June 2019
3. P.Rayavel, "**Inviolable Armament Surveillance System Using IoT for Home Safety**", International Conference on Advances in Engineering Science Management & Technology (ICAESMT) - 2019, Uttaranchal University, Dehradun, India, by SSRN Journal in may 2019
4. P.Rayavel, "**A Survey For Diabetic Retinopathy**" IEEE International Conference on Soft-computing and Network Security IEEE ICSNS 2018 From Feb 14 to 16, 2018 In SNS College of Technology, Coimbatore.
5. P.Rayavel, "**Dynamic Traffic Control Framework Utilizing Edge Detection Algorithm**" IEEE International Conference on Soft-computing and Network Security IEEE ICSNS 2018 From Feb 14 to 16, 2018 In SNS College of Technology, Coimbatore.
6. P.Rayavel, "**Detection And Classification Of Animals To Alert Vehicles On Roads To Avoid Collision**" national Conference on Information and communication engineering (NICE 17) during 21st April 2017 In Sri Sairam Institute Of Technology



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7. P.Rayavel, "**VOLUNTANOVO**" National Conference on Information and communication engineering (NICE 17) during 21st April 2017 In Sri Sairam Institute Of Technology
8. P.Rayavel, "**Noise Removal For Object Tracking Based on HSV Color Space Parameter Using CAMSHIFT**", ICCOS`11 *International conference on Communication and Signal Processing [ISSN-2229-3078]* in Karuniya University presented on 17th and 18th Mar `11
9. P.Rayavel, "**Recognise the Script using Online Handwrittern Document**", 2nd *National conference on Reasearch Issues In Computer Science & Engineering [ISBN-978-81-920889-0-7]* in RMK Engineering College presented on 1st and 2nd March `11.
10. P.Rayavel, "**CAMSHIFT Object Tracking Algorithm Based On Inter-Frame Difference For Noise Removal**" ,*International conference on Information Communication and Embedded Systems[ISBN-978-93-80697-65-9] (IEEE& CSI)* in S A Engineering College presented on 23rd and 24th Feb `11.
11. P.Rayavel, "**Noise Removal For Object Tracking Based on HSV Color Space Parameter Using CAMSHIFT**", ICCOS`11 *International Journal of COMPUTATIONL INTELLIGENCE & TELECOMMUNICATION SYSTEMS [ISSN-2229-3078]* in Karuniya University presented on 17th and 18th Mar `11.

Workshop/Hackathon/Conferences/ FDP Organized:-

1. Organized SAIRAM SDG INSPIRETHON 1.0 for **Intera - Competition** during 2023 act as College Coordinator
2. Organized SAIRAM SDG IDEATHON 3.0 for **Intera - Competition** during 2022 act as College Coordinator
3. Organized SAIRAM SDG SOLVEAHON 2.0 for **Intera - Competition** during 2022 act as College Coordinator
4. Organized SAIRAM SDG INNOVATHON 1.0 for **Intera - Competition** during 2022 act as College Coordinator
5. Organized SAIRAM SDG IDEATHON 2.0 for **Intera - Competition** during 2021 act as College Coordinator.



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6. Organized SAIRAM SDG SOLVEATHON 1.0 for **Intera - Competition** during 2021 act as College Coordinator.
7. Organized SAIRAM SDG IDEATHON 1.0 for **Intera - Competition** during 2020 act as College Coordinator.
8. Organized 24 hours Hackathon (SIT-SIH2020) for **Intera - Competition** during 07.01.2020 act as Department Coordinator
9. Organized one day Technical Symposium (NUTPAM`19) for **for National Level Competition** on **26.09.2019**.
10. Organized 24 hours Hackathon (AIMBIGATHON) for **Intera - Competition** during **26.09.2019 and 27.09.2019**.
11. Organized Three days Workshop on **CLOUD COMPUTING WITH AZURE WORKSHOP** by Mr.P.Vignesh From Infosys Pvt. Ltd for 3rd Year CSE Students during **11.07.2019 and 13.07.2019**.
12. Organized Three days Workshop on **JAVA FUNDAMENTALS WORKSHOP** by Mr.S.Anand Kumar From Infosys Pvt. Ltd for 2nd Year CSE Students during **04.07.2019 and 07.07.2019**.
13. Organized **CSI STATE STUDENT CONVENTION-2019 (CS³C - 2019)** during 13th March 2019.
14. Organized Three days Workshop on **MACHINE LEARNING USING MATLAB WORKSHOP** through EPRLABS for 3rd Year CSE Students during **06.02.2019 and 08.02.2019**.
15. Organized Three days Workshop on **MOBLIE APPLICATION DEVELOPMENT WORKSHOP** through EPRLABS for 2th Year CSE Students during **06.02.2019 and 08.02.2019**.
16. Organized Three days Workshop on **JAVA FUNDAMENTALS WORKSHOP** through SANDS (Signals and Systems Pvt. Ltds) for 2th Year CSE Students during **17.08.2018, 20.08.2018 and 21.08.2018**.
17. Organized Three days Workshop on **IOT & GADGET DEVELOPMENT WORKSHOP** through EPRLABS for 3rd Year CSE Students during **20.08.2018, 21.08.2018 and 24.08.2018**.
18. Organized a **DST NIMAT & EDI India, Government of India, Gujarat Sponsored "A Three Days Entrepreneurship Awareness Camp"** for 3rd Year CSE Students during **26.09.2018 and 29.09.2018**.



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19. Organized first International Conference on Computing and Information Technology (ICCIT'15) during August 13th & 14th 2015.
20. Organized Second **National Conference** on Information and communication engineering (NICE 17) during 21st April 2017.
21. Coordinator for **PROJECT EXPO`18** Events in April 2018.
22. Coordinator for **PROJECT EXPO`17** Events in April 2017.
23. Organized Eight days Workshop on **JAVA FUNDAMENTALS WORKSHOP** for 2th Year CSE and IT Students from **22.1.18 to 25.1.2018 and 13.2.18 to 16.2.2018**.
24. Organized Eight days Workshop on **MVC Paradigms WORKSHOP** for 3th Year CSE and IT Students from 7.8.2017 to 12.8.2017.
25. Organized Two days Workshop on **DOT NET PROGRAMMING** in Association with Computer Society of India from 13.07.2017-14.07.2017
26. Organized four Days Workshop on **HADOOP** through ICTACT for 4th Year CSE and IT Students(22.8.16-24.8.16,26.08.2016)
27. Organized two Days Workshop on "**Java Frameworks**" from 04.08.2016 to 05.08.2016.
28. Organized one day workshop on **LEX and YAAC tool** in Principles of Compiler Design on 24.2.16
29. Attended a faculty Development Program on "**Introduction to PHP and MYSQL**" during 18/6/15 and 19/6/15.
30. Organized International Seminar on "**Recent Trends in Computer Technology**" by Dr.Emerson Raja Joseph, Multimedia University, Malaysia on 2-09- 2014
31. Organized Guest Lecture on "**Theory of Computation**" by Mr. V. Vijayarajan, VIT University, Vellore on 30.6.2014
32. Organized Guest Lecture for various subjects like AI, DSP,
33. Organized Workshop on "**ANDROID**" by Mr.Pramod Mooriath, Chairman, CSI Chapter on 11.7.2014.