



SRI RAAJA RAAJAN

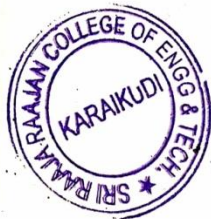
COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)



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Karaikudi – 630 301, Sivagangai Dt, Tamil Nadu
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CENTER FOR IMAGE PROCESSING



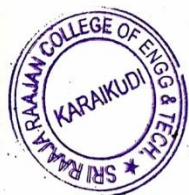
ABOUT THE CENTRE:

The Image Processing Centre (IPC) at Sri Raaja Raajan College of Engineering and technology is a cutting-edge research and development facility dedicated for advancing the field of image processing and computer vision. Our mission is to push the boundaries of image analysis and understanding, and apply this knowledge to real-world problems. Established in 2021 under the Dr.A.P.J.AbdulKalam Research Centre, the IPC has a strategic partnership with Grid-Lab Solutions, Karaikudi. Through this collaboration, our students have benefited from comprehensive training on the fundamentals of image processing and mathematical tools for image processing, as well as practical hands-on sessions using MATLAB.



OBJECTIVE:

- ✓ To provide a state-of-the-art infrastructure for image processing research
- ✓ To facilitate collaborative research among students, faculty members, and industry partners
- ✓ To develop innovative solutions for real-world problems using image processing techniques and future workforce needs.

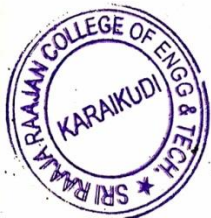


FACILITIES AVAILABLE:

- 1. High-Performance Computing (HPC) infrastructure:** Powerful servers, GPUs, and TPUs for processing large datasets and training AI models.
- 2. Data Storage:** Large storage capacity for storing datasets, models, and research data.
- 3. Software and Tools:** Licenses for Image Processing software, frameworks, and tools like MATLAB, Python (with libraries like NumPy, SciPy, and scikit-image),
- 4. Networking and Connectivity:** High-speed internet and networking infrastructure for data transfer and collaboration.
- 5. Workstations and Devices:** High-end workstations, laptops, and devices for students.
- 6. Meeting and Collaboration Spaces:** Rooms for team meetings, brainstorming, and project discussions.
- 7. Security and Access Control:** Secure access controls, firewalls, and encryption to protect sensitive data and IP.
- 8. Power and Cooling:** Adequate power supply and cooling systems to support HPC infrastructure.
- 9. Acoustic and Noise Reduction:** Soundproofing and noise reduction measures to minimize distractions.
- 10. Ergonomic and Comfortable Workspaces:** Comfortable seating, lighting, and ergonomic furniture for researchers and students.

FACULTY COORDINATORS:

- 1. Mr.S.VENGATESAN, AP/ECE (CENTRE IN CHARGE)**
- 2. Mrs.V.SUBASHINI, AP/ECE**

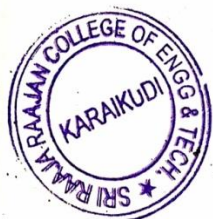


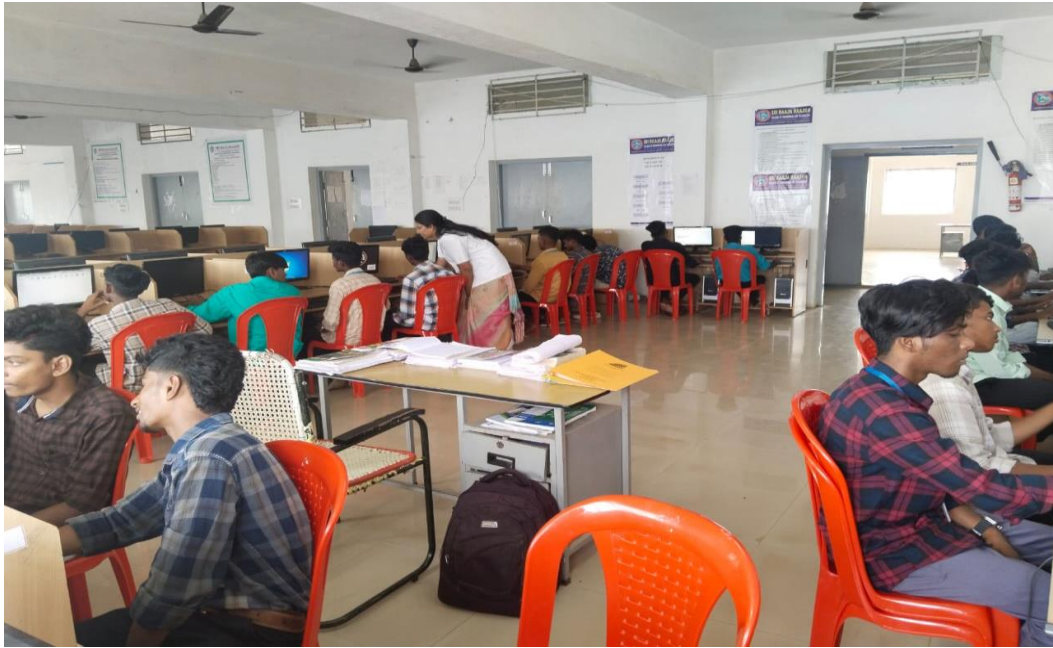
ACTIVITIES PERFORMED:

The following Training activities are conducted in the field of Image Processing. With these training programmes, the students gained knowledge in the concepts of

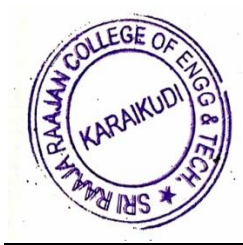
- (i) Image Processing.
- (ii) MATLAB and its applications.
- (iii) Computer Vision.
- (iv) Expert Systems.

| SL .N O | NAME OF ACTIVITIES | RESOURCE PERSON | YEAR | NUMBER OF STUDENTS |
|-----------------|---|--|---------------|-----------------------|
| WORKSHOP | | | | |
| 1. | MACHINE LEARNING FOR IMAGE CLASSIFICATION | MRS.K ISABELLA RANI AP/ECE ,SRR CET | 2024- 2025 | 40 |
| 2. | IMAGE PROCESSING AND COMPUTER VISION | MR.RAJASEKARAN GRIDLAB SOLUTION | 2023- 2024 | 34 |
| 3. | ADVANCES ON DIGITAL IMAGE PROCESSING | MRS.L.MALATHY HOD/ECE,CCET | 2022- 2023 | 19 |
| 4. | IMAGE PROCESSING ON OPEN CV | MR.ARUNAKHANTH KOPPUDAIYAMMAL TECH., | 2021- 2022 | 15 |
| SEMINAR | | | | |
| 1. | DEEP LEARNING FOR IMAGE CLASSIFICATION AND OBJECT DETECTION | MR.T.N.BALAJI,HOD/E CE,SRR CET | 2024- 2025 | 40 |
| 2. | IMAGE PROCESSING IN INDUSTRIAL TECHNOLOGY | MRS.V.GOWSALYA, AS P/ECE,SRR CET | 2023- 2024 | 59 |
| 3. | APPLICATION OF IMAGE PROCESSING AND COMPUTER VISION | MR.S.VENGATESAN AP/ECE,SRR CET | 2022- 2023 | 35 |
| 4. | INTRODUCTION OF IMAGE PROCESSING | MR.T.KAMESWARAN, AP/ECE,SRR CET | 2021- 2022 | 19 |





Training on MATLAB



OUTCOMES:

1. Projects done by students, based on image processing:

- ✓ Face detection and recognition of students attendance system in AY2021-22



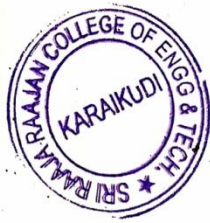
Detecting the Face by using MATLAB

- ✓ Creating CCTV camera system using artificial intelligence, using image processing and cyber security in AY2023-24

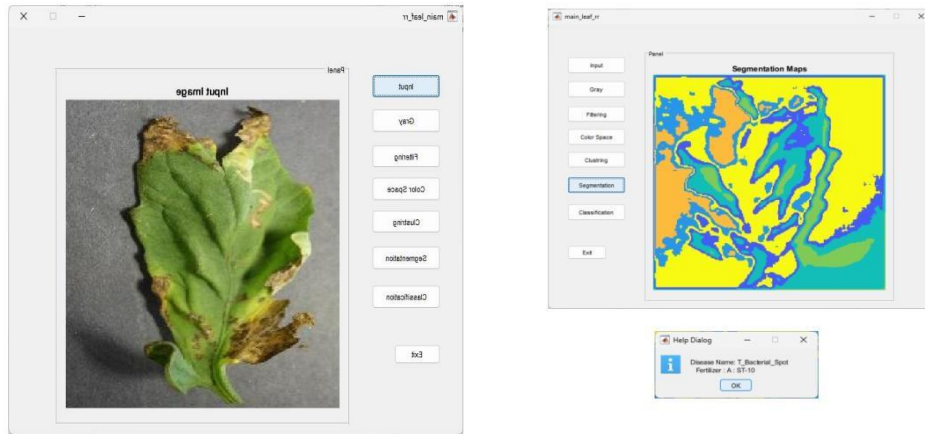


Capturing the image and detecting the persons

CCTV SCREEN PHOTO.

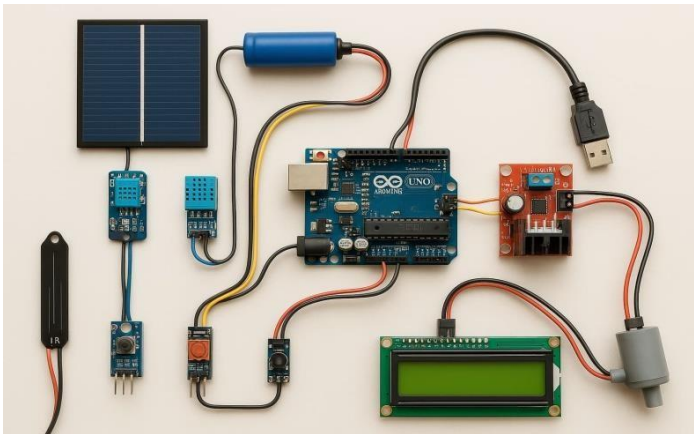


- ✓ **Agricultural crop disease recognition and effective Pesticide Recommendation Using Deep Nn (AY-24-25)**

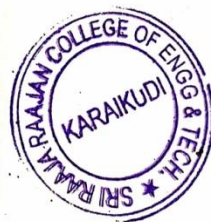


Software based images on leaf detecting

- ✓ **Solar based low power sensor with irrigation system and crop Protection Using Cloud IOT Network (AY-24-25)**




Hardware kit



2. Students got placed in companies in the field of Image Processing

| COMPANY NAME | NUMBER OF STUDENTS | | |
|-------------------|--------------------|-----------|-----------|
| | 2022-2023 | 2023-2024 | 2024-2025 |
| SRIMUKHA | 9 | 6 | - |
| LAYAM | 10 | 4 | - |
| QSPIDERS | 5 | 1 | 6 |
| BESANT TECHNOLOGY | - | - | 8 |
| DELPHI TVS | 9 | 5 | 10 |




PRINCIPAL
Dr. A. ELANGO
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SRI RAJA RAJAN COLLEGE OF
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AMARAVATHIPUDUR, KARAIKUDI