



SRI RAAJA RAAJAN

COLLEGE OF ENGINEERING AND TECHNOLOGY

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

146/14B1, Amaravathi Village, Amaravathiputhur Post,

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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:

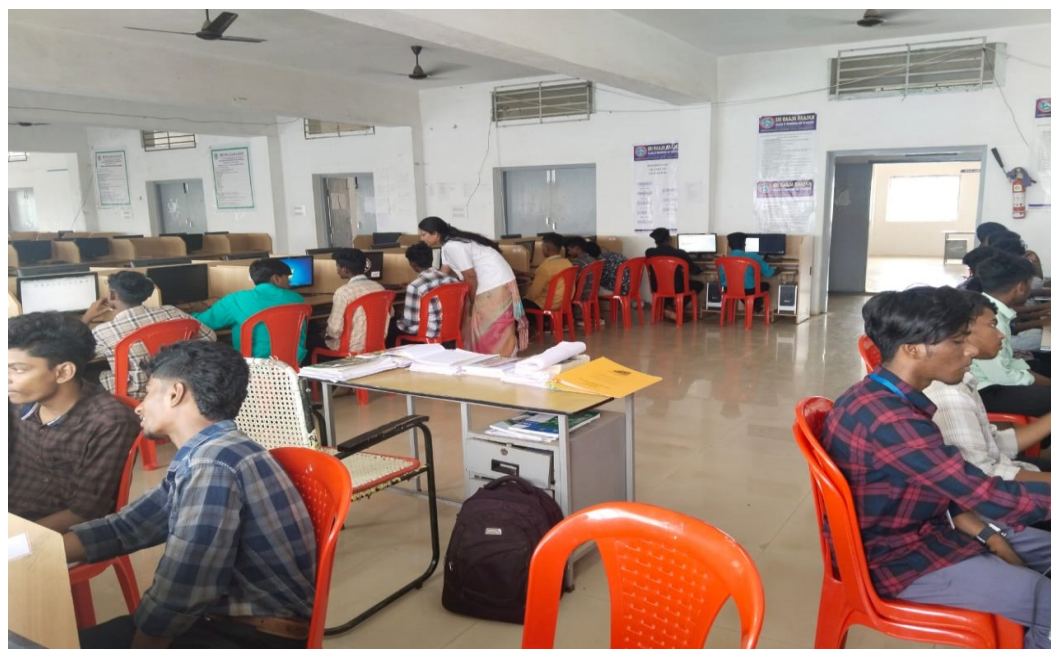
- 1. Mr. S.VENGATESAN, AP/ECE (CENTRE IN CHARGE)**
- 2. Mrs. V.SUBASHINI, AP/ECE**

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
<u>WORKSHOP</u>				
1	IMAGE PROCESSING AND COMPUTER VISION	MR.RAJASEKARAN GRIDLAB SOLUTION	2023- 2024	34
2	ADVANCES ON DIGITAL IMAGE PROCESSING	MRS.L.MALATHY HOD/ECE,CCET	2022- 2023	19
3	IMAGE PROCESSING ON OPEN CV	MR.ARUNAKHANTH KOPPUDAIYAMMAL TECH.,	2021- 2022	15
<u>SEMINAR</u>				
1	IMAGE PROCESSING IN INDUSTRIAL TECHNOLOGY	MRS.V.GOWSALYA, AS P/ECE,SRR CET	2023- 2024	59
2	APPLICATION OF IMAGE PROCESSING AND COMPUTER VISION	MR.S.VENGATESAN AP/ECE,SRR CET	2022- 2023	35
3	INTRODUCTION OF IMAGE PROCESSING	MR.T.KAMESWARAN, AP/ECE,SRR CET	2021- 2022	19

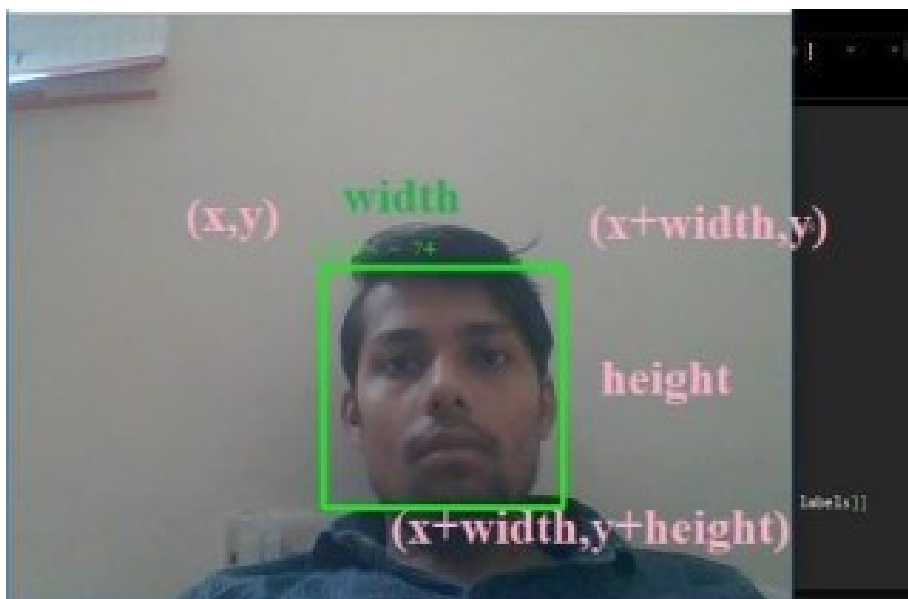


Training on MATLAB

OUTCOMES:

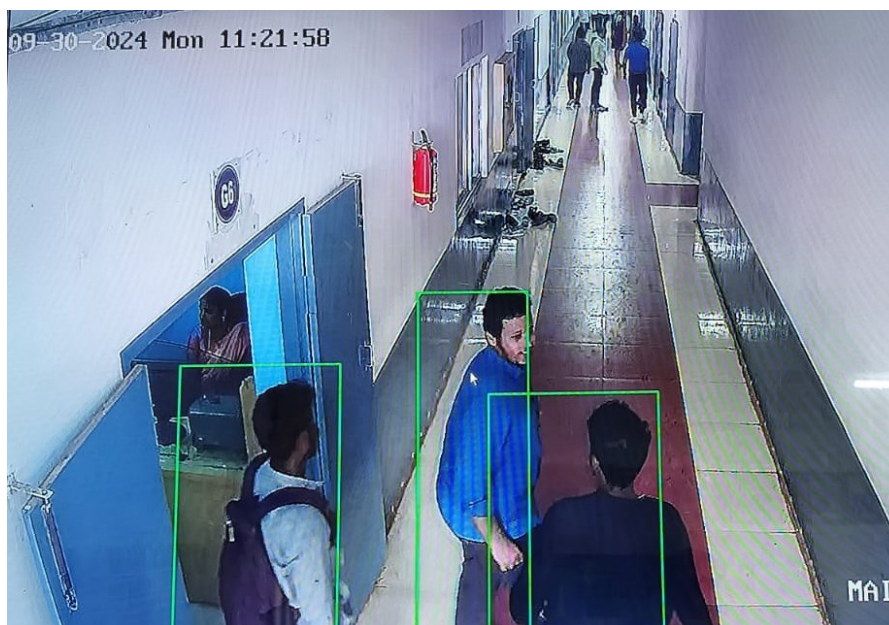
1. Projects done by students, based on image processing:

- ✓ 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



CCTV Screen Display at Chairman's Chamber

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

COMPANY NAME	NUMBER OF STUDENTS	
	2022-2023	2023-2024
SRIMUKHA	9	6
LAYAM	10	4
QSPIDERS	5	1