

SREYAS INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to JNTUH) Thatti Annaram(v), Bandlaguda, Nagole, Hyderabad - 500068.

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

FIVE DAYS

FACULTY DEVELOPMENT PROGRAMME

ON "COMPUTER VISON ANND IMAGE PROCESSING"



17th October – 21st October, 2016 Organized by

Department of CSE

Sreyas Institute of Engineering and Technology

(Thatti annaram(v),Bandlaguda,Nagole,Hyd,500068)

Contact: csehod@sreyas.ac.in

<u>Preamble:</u>

Computer Vision tries to do what a human brain does with the retinal data that means understanding the scene based on image data. That mainly involves segmentation, recognition and reconstruction (3D) and these works together to give us the scene understanding. Computer Vision employs image Processing and Machine learning as well as some of the other mathematical methods to do the mentioned tasks. However, Image processing, is mainly focused on processing raw images without giving any knowledge feedback on them. For example if you want to do a semantic image segmentation (A computer vision task) you might apply some filtering on the image during the process (an image processing task) or try to recognize the objects in the scene(a machine learning task). This FDP aims at providing strong theoretical background along with practical experience in the field of CV&IP and how the visualization and analysis of the images could be efficiently done with the help of image processing tools. In the growing and emerging era of "Digital India" initiative, the use of digital image processing becomes pertinent in the Image Processing area since several applications of the images determine and contribute towards socio-economic status of the regions and the country as whole. The image processing tools would be delivered by eminent resource persons of image processing experts.

Major Course Contents:

- Fundamental of IP (in spatial and Frequency domain), Object Tracking.
- PSO assisted Kalaman Filtering for object Tracking.
- Image Processing in Big Data.
- Digital Image Filtering
- Segmentation and Object Localization.
- Classical to soft computing Approaches.
- Detection of temporal discontinuities in video sequences.
- Deep Neural Networks for detection of temporal discontinuities
- Hardware Design accepts for machine learning algorithms.
- Hardware implementation of face recognition system
- Installation of Hadoop, SPARK clusters and integrating them with MATLAB for text and Image Processing Hands-on Experiences

Eligibility:

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How to apply:

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator by speed-post. It is also mandatory to send scanned application form and demand draft through e-mail <u>vignesh.j@sreyas.ac.in</u> and selection will be intimated only through mail.

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Department of CSE

The Department of Computer Science and Engineering Established in the year 2011. The major objective of Department is to impact high quality Education and research. The department of CSE is an intellectually challenging discipline . Our Students undergo entrepreneurship and inventiveness workshops and coding sessions. which strive to be the most innovative in the world. The infrastructure is absolutely world-class with opportunities to build practical skills in stat-of-the-art laboratories and workshops

| RESOURCE PERSON: | | ORGANIZING COMMITTEE: | | REGISTRATION FORM | | |
|--|------------|--|-------------------------|---|-----------------------------------|--|
| Eminent faculty from academia and industry/ | | Chief Patrons: | | | | |
| organizations will be handling the sessions. | | Mr.CH,Ravindranath yadav | | | | |
| ➢ Dr.Ch. Samun | | Secretary | | Name (in Capital letters) | : | |
| Dr.Ch. Samun Professor, Department of CSE MVSR Engineering College. | | Mr Anonthula Vinauluun | non Doddy | | | |
| | | Mr.Ananthula Vinaykumar Reddy | | Institution / Organization Name : | | |
| > Dr.MA.Azeem | | Chairman | | | · | |
| Professor, Department of CSE MVSR Engineering College. | | | | Designation | | |
| www.src Engineering Conege. | | Patron: | | Designation | | |
| WHO CAN ATTEND: | | Dr. Suresh Akella | | Department | | |
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| | | | | Address | | |
| | | Convener: | | for Communication | : | |
| REGISTRATION: | | Mrs JOSHI PADMA | | | | |
| Interested candidates can visit the following link: https:www.sreyas.ac.in | | HOD/CSE | | Email id | : | |
| | | <u>Co-ordinator(s):</u> | | Mobile No | : | |
| | | Dr. J VIGNESH | | Date | : | |
| REGISTRATION FEE: | | Professor Cse | | | | |
| Faculty : Rs 700 | | Dr R RAMESHKUMAR | | | Signature of the candidate | |
| Research Scholar & | : Rs 1000 | Associate Professor Cs | Associate Professor Cse | | | |
| Industry Persons | | | | CERTIFICATE | | |
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| Last date of Registration | : 12.10.16 | Dr. J VIGNESH | Dr R RAMESHKUMAR | Five Day FDP on "Cor | nputer Vision and Image | |
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PURPOSE OF FDP

Computer Vision tries to do what a human brain does with the retinal data that means understanding the scene based on image data. That mainly involves segmentation, recognition and reconstruction (3D) and these works together to give us the scene understanding. Computer Vision employs image Processing and Machine learning as well as some of the other mathematical methods to do the mentioned tasks.

However, Image processing, is mainly focused on processing raw images without giving any knowledge feedback on them. For example if you want to do a semantic image segmentation (A computer vision task) you might apply some filtering on the image during the process (an image processing task) or try to recognize the objects in the scene(a machine learning task).

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RESOURCE PERSON PROFILE

Dr. CH SAMSON

Designation: Professor Academic Qualifications: Ph.D Email: <u>samson_cse@mvsrec.edu.in</u>

Area of interest: Image Processing, Cryptography and Network Security.

Subjects taught at U.G Level: Computer Networks, Digital Image Processing Mobile Computing,

Data Communication, Operating Systems, Network Protocols, Wireless Networks, Information

Security, Advanced Computer Architecture Computer Organization, Wireless Communications,

E-commerce, C Programming, Computer Graphics, Unix Shell Programming, Network

Programming, Object oriented Analysis and Design.

Subjects taught at P.G Level: Data Structures and Algorithms, Advanced Computer Networks,

Wireless Networks and Mobile Computing, Image Processing, Information Security

Number of Research Papers/Journals/Books published: 25

Number of Workshops/Conference/FDP/Seminar conducted& Attended: 24

Awards: Received National Merit Scholarship and Telugu Vignana Parithoshikam in SSC. Received Best Teacher award for the years 2006, 2007, 2008, 2011 and 2012 at Sreenidhi Institute of Science & Technology, Hyderabad





Hyderabad | PIN: 500068

Dr. MA Azeem CSE, MVSR

Mohammed Abdul Azeem is working as Associate Professor in CSED of Maturi Venkata Subba Rao Engineering College since 1999.He is a Research Scholar in CSE Department at JNTU,Hyderabad.He did his B.E and M.Tech in Computer Science & Engineering from Osmania University and pursuing his Ph.D in Wireless Sensor Networks from JNTU Hyderabad. His area of specialization includes Mobile Ad hoc Networks, Sensor Networks, Network Security, Data Structures & Algorithms and Information Security. He has published 8 papers in international journals and 2 papers presented in national conferences and 2 papers presented in international conferences. He is a life member of CSI and IEI.

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Subjects taught at P.G Level: Advanced Algorithms, Network Security, Distributed

Computing

Number of Research Papers/Journals/Books published: 6

Workshops/Conference/FDP/Seminar conducted& attended: 18

Awards: Best male teacher 2005-06.

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| Faculty : Rs 700 | | Dr R RAMESHKUMAR | | | Signature of the candidate | |
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