SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi.)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560 057.
Web: www.sapthagiri.edu.in, Email: principal@sapthagiri.edu.in

Phone:080-28 372800/1/2   Fax: 080-28 372797

ACADEMIC YEAR 2014-2015

Date: 16/07/2014

CIRCULAR

Department of Electronics and Communication Engineering is conducting a five days

faculty development programme on **Image processing and applications using Mat lab** for the

technical developments of the faculty from 22nd July 2014 to 26th July 2014. All the faculty can

register their names with Prof. Prof .Suma V Shetty   and Prof .Sudha.M.S .

HOD

Department of ECE

Head of the Department
Electronics & Communication
Sapthagiri College of Engineering
Bangalore 560 057

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

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ACADEMIC YEAR 2014-2015

Minutes of Meeting

A meeting of all the facultiy was held on 08/07/2014 at HOD's office, Department of ECE, Sapthagiri College of Engineering.

Agenda:

➢ In the meeting the syllabus, schedule of five days faculty development programme on **Image processing and applications using Mat lab** to faculty members was discussed and approved by the HOD.

Programme schedule:

Detailed Syllabus & Schedule

DAY 1 - Introduction And Digital Image Fundamentals
Date: 22/07/2014

Time	Topics
08:30 am To 10:15 am	The origins of Digital Image Processing Examples of Fields that Use Digital Image Processing Fundamentals Steps in Image Processing Elements of Digital Image Processing
	Tea Break
10:30 am To 12:30 pm	Systems Introduction And Digital Image Fundamentals Image Sampling and Quantization
	Lunch Break
01:30 pm To 03:00 pm	Some basic relationships like Neighbours, Connectivity, Distance Measures between pixels Translation, Scaling,
	Tea Break
03:15 pm To 04:00 pm	Rotation and Perspective Projection of image

DAY 2 -MATLAB
Date: 23/07/2014

Time	Topics
08:30 am To 10:15 am	Introduction And Digital Image Fundamentals Linear and Non Linear Operations
10:30 am To 12:30	Digital image Representation Reading, Displaying

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ACADEMIC YEAR 2014-2015

pm	
01:30 pm To 03:00 pm	Writing Images using MATLAB Data Classes
03:15 pm To 04:00 pm	Image Types using MATLAB Digital image Fepresentation Converting Between data classes and Image

DAY 3 – Image Enhancement in the Spatial Domain:
Date: 24/07/2014

Time	Topics
08:30 am To 10:15 am	Smoothening and Sharpening Spatial Filters Intensity
	Tea Break
10:30 am To 12:30 pm	Transformation Function (MATLAB)
	Lunch Break
01:30 pm To 03:00 pm	Image Enhancement in the Spatial Doma r Histogram Processing
	Tea Break
03:15 pm To 04:15 pm	Function Plotting (MATLAB)

DAY 4 – Image Enhancement in the Frequency Domain:
Date: 25/07/2014

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ACADEMIC YEAR 2014-2015

Time	Topics
08:30 am To 10:15 am	Introduction to Fourier Transform and the frequency Domain Computing
	Tea Break
10:30 am To 12:30 pm	Visualizing the 2D DFT (MATLAB)
	Lunch Break
01:30 pm To 03:00 pm	Image Compression: Coding Inter pixel and Psycho visual Redundancy
	Tea Break
03:15 pm To 04:15 pm	Image Compression models Compression standards

DAY 5 – Image Segmentation:
Date: 26/07/2014

Time	Topics
08:30 am To 10:15 am	Detection of Discontinuities
	Tea Break
10:30 am To 12:30 pm	Edge linking and boundary detection
	Lunch Break
01:30 pm To 03:00 pm	Patterns and Pattern Classes
	Tea Break
03:15 pm To	Decision-Theoretic Methods

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ACADEMIC YEAR 2014-2015

04:00 pm	

The following members were present in the meeting and the syllabus and lesson plan for the faculty development programme has been decided.

Sl No.	Faculty Name	Designation	Signature
1.	Prof.Agalya P.	Associate Professor	
2.	Prof.Shobha S.	Associate Professor	
3.	Prof.Ravishankara M. N.	Associate Professor	
4.	Prof.Shobha I Hugar	Assistant Professor	
5.	Nɣ H C Sateesh Kumar	Guest Speaker	

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SAPTHAGIRI
College of Engineering

5 Days FDP
on

"Image Processing applications using MATLab"
22nd July 2014 to 26th July 2014

Organized by

Department of Electronics & Communication Engineering

Sapthagiri College of Engineering

#14/5, Chikkasandra, Hesaraghatta
Main Road, Bengaluru 560057

Phone: 080-28372800/01/02/03

About the College

Sapthagiri Group of Institutions is the creation of Sri Srinivasa Educational & Charitable trust, Bengaluru. Sapthagiri College of Engineering is the brainchild of honorable Sri Giriyappa, Founder Chairman and Sri. G. Dayanand, Chairman of Sri Srinivasa Educational & Charitable trust. Sri G.D. Manoj is the Executive Director of SCE. SCE began its glorious journey in the year 2001. It is approved and accredited by AICTE, New Delhi and is affiliated to VTU Belagavi, Karanataka. The campus of Sapthagiri College of Engineering is spread across 6.5 acres of lush green land with beautiful landscape. The area enjoys pleasant atmosphere throughout the year. The college has secured 22 University ranks and 4 Gold medals.

Vision

To create and maintain an enabling learning environment for the students to transform them as thorough professionals to meet diverse professional demands of global environments.

Mission

To provide quality education to the students to pursue courses in different engineering disciplines and to transform their professional dreams into reality and to offer competent budding professionals to the society.

About the Department:

The Department of Electronics and Communication Engineering (ECE), one of the evergreen and core departments in the Institution was established in the year 2001, is affiliated to Visvesvaraya Technological University (VTU), Belagavi and approved by All India Council for Technical Education (AICTE). The Department offers full-time UG programme in Electronics & Communication Engineering with an intake of 120, PG Programme in VLSI Design and Embedded systems with an intake of 24 and has a research center offering Ph.D/M.Sc (Engg.) in Electronics and Communication Engineering recognized by VTU, Belagavi.

About the Faculty Development Programme:

Its objectives are

- To enhance the Professional skill in the faculty in the field of materials processing.
- To develop the research culture and motivate the faculty to involve in research.

Topics Covered

- Introduction to MAT Lab
- Different Enhancement Technique.
- Restoration & segmentation algorithm.
- Color Image processing and Applications.
- Hands on practice using MAT lab.

Resource Persons:

Dr. H C Sateesh Kumar,
Associate Professor,
Department of Electronics & Communication Engineering
Sai Vidya Institute of Technology, Bengaluru

Prof. Agalya P
Associate Professor
Department of Electronics & Communication Engineering
Sapthagiri College of Engineering, Bangalore

Prof. Shobha S
Associate Professor
Department of Electronics & Communication Engineering
Sapthagiri College of Engineering, Bangalore

Address for Registration /Communication

Prof. Karthik N C : 8880666613

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ACADEMIC YEAR 2014-2015

2014-15(ODD)

List of participants and Attendance FDP on "Image Processing and Applications using Mat la
From 22nd July 2014 to 26th July 2014

Sl. No.	Name of the Faculty	22/07/14		23/07/14		24/07/14		25/07/14		26/07/14	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	Shilpa. V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Satish murthy										
3	Geetha. C.R										
4	Prathibha P										
5	Shobha H										
6	Sandhya Rani. M.H										
7	Shobha. B.N	BNS	BNS	BNS	BNS	BNS	BNS	BNS	BNS	BNS	BNS
8	Sasmitha Mohapatra										
9	Ravishankar M.N										
10											
11	Suma. V. Shetty										
12	Vani. V										
13	Vani. A										
14	Karthik. N.C										
15	Vijaya Lakshmi.k										
16	Anitha murthy										
17	Sudha. M.S										
18	Sangeetha. K. Sini										
19	Madhura. SH										
20	Darshitha. K.S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Jayaprabha. P.V										
22											
23											
24											
25											
26											

Principal
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Five days Faculty Development Program Report

On

"Image processing applications using MATLab"

Date: 22/7/2014 to 26/7/2014
Time: 9 AM to 4PM
Venue: DSP and HDL Lab, Faraday block, SCE

RESOURCE PERSONS PROFILE:

1.Name: Hr. H C Sateesh Kumar
Current Status: Assoc. Professor
Department of ECE
Sai Vidya Institute of Technology, Bengaluru
Qualification B.E., M.Tech .

Professional Experience: He has 24 years of Teaching, research and administrative experience. He has over 40 research publications in refereed International Journals and Conference Proceedings. His area of interest is in the field of Signal Processing and Communication Engineering. He is the life member of Institution of Engineers (India), Institution of Electronics and Telecommunication Engineers and Indian society for Technical Education.

2. Name: Prof. Agalya P
Current status: Assoc. professor
Department of ECE,
Sapthagiri college of engineering,Bangaluru
Qualification B. Tech. MTech. (PhD)
Professional Experience: Has 18+ years of Teaching experience in various subjects in the field of Electronics and communication. Currently working as associate professor in the department of Electronics and Communication Engineering, Sapthagiri college of Engineering, Bangalore. Has published various papers in National and International level conferences. Has been resource person for various workshops conducted in Sapthagiri college of Engineering.

3. Name: Prof. Shobha S
Current status: Assoc. professor
Department of ECE,
Sapthagiri college of engineering,Bangaluru
Qualification B. Tech. MTech. (PhD)

Professional Experience: Has 17+ years of Teaching experience in various subjects in the field of Electronics and communication. Currently working as associate professor in the department of Electronics and Communication Engineering, Sapthagiri college of Engineering, Bangalore. Has published various papers in National level conferences.

Summary Report:

Aiming to provide an additional skill and training on technical aspects related to Image processing Department of Electronics and Communication Engineering conducted FDP on "Image Processing and application using MATLAB" from 22/7/2014 to 26/7/2014 by Prof. Sateesh Kumar an expert on the subject.

On first day session started with basics of MATLAB programming and introduction to image processing. The second day the session started with different enhancement techniques available for images. In the afternoon session hands-on provided in the DSP Lab.

On the third day session started with restoration and segmentation algorithms used in digital image processing. On the fourth day session started with colour image processing and its applications.

On the last day session was concluded with some case studies. The technical session was very helpful in enhancing the technical knowledge amongst the faculty members. Overall the faculties felt that session was informative.

Photo Gallery

Mr. H C Sateesh Kumar *delivering speech to participants*

Chairman

Academic committee

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Certificate

This is to Certify that Mr./Mrs. _Karthik . N. C._ of has participated and

successfully completed Five days Workshop on Image processing and applications

using Matlab from   22nd July to 26th July 2014 organized by the Electronics and

Communication Engineering Department, Sapthagiri College of Engineering.

HOD

Dept. of ECE

apthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
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Principal