



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: 12/01/2015

CIRCULAR

Department of Electronics and Communication Engineering is conducting a five days faculty development programme on Multi modal image fusion for the technical developments of the faculty from 19th Jan 2015 to 23rd Jan 2015. All the faculty can register their names with Prof. Vani A and Prof. Shilpa V

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

HOD

Department of ECE

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



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ACADEMIC YEAR 2014-2015

Minutes of Meeting

A meeting of all the faculty was held on 07/01/2015 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 **Multi modal image fusion** to faculty members was discussed and approved by the HOD.

Programme schedule:

Detailed Syllabus & Schedule

DAY 1 - Multi-Modality Registration And Fusion Of Medical Image Data

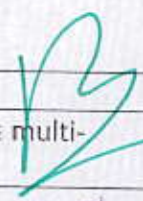
Date: 19/01/2015

Time	Topics
08:30 am To 10:15 am	Digitalisation of health care providing facilities allows US to maximize the usage of digital data from one patient obtained by various modalities.
Tea Break	
10:30 am To 12:30 pm	Complex view on to the problem can be achieved from the site of morphology as well as functionality
Lunch Break	
01:30 pm To 03:00 pm	Multi-modal registration and fusion of medical image data is one of the examples that provides improved insight
Tea Break	
03:15 pm To 04:00 pm	contact Sleep Study by Multi-Modal Sensor Fusion

DAY 2 - Extended feature-fusion guidelines to improve image-based multi-modal biometrics

Date: 20/01/2015

Time	Topics
08:30 am To	Full Text Available The feature-level, unlike the match score-level, lacks multi-


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To 10:15 am	modal fusion guidelines
10:30 am To 12:30 pm	Demonstrates a practical approach for improved image-based biometric feature-fusion. The approach extracts and combines the face, fingerprint
01:30 pm To 03:00 pm	Multi-Modal Literacies in Middle Grades Science
03:15 pm To 04:00 pm	Visual communication spans our understanding of adolescent multi-modal capabilities that reach beyond the traditional conventions of linear speech and written text in the science curriculum

DAY 3 – Multi-Modality Medical Image Fusion Based on Wavelet Analysis and Quality Evaluation

Date: 21/01/2015

Time	Topics
08:30 am To 10:15 am	Multi-modality medical image fusion has more and more important applications in medical image analysis and understanding
Tea Break	
10:30 am To 12:30 pm	Images from different modalities such as PET-MRI and CT-MRI
Lunch Break	
01:30 pm To 03:00 pm	Fusion Guidelines for Image-Based Multi-Modal Biometric Fusion
Tea Break	
03:15 pm	Feature level, unlike the match score level, lacks multi-modal fusion guidelines



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ACADEMIC YEAR 2014-2015

To 04:15 pm	
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DAY 4 – Drug-related webpages classification based on multi-modal local decision fusion

Date: 22/01/2015

Time	Topics
08:30 am To 10:15 am	Convolutional Networks (FCN) have led to a great improvement of semantic labelling for various applications including multi-modal remote sensing data. Although different fusion strategies have been reported for multi-modal data
Tea Break	
10:30 am To 12:30 pm	Multi-modal local decision fusion is used for drug-related WebPages classification. First, meaningful text are extracted through HTML parsing, and effective images are chosen by the FCCARSS algorithm.
Lunch Break	
01:30 pm To 03:00 pm	Multi-Instance Learning is used to classify those drug related WebPages. Experimental results demonstrate that the classification accuracy of multi-instance learning with multi-modal local decision fusion is much higher than those of single-modal classification
Tea Break	
03:15 pm To 04:15 pm	SVM classifier is trained for the cannabis, which is represented by the mid-feature of BOW model

DAY 5 – On the Multi-Modal Object Tracking and Image Fusion Using Unsupervised Deep Learning Methodologies

Date: 23/01/2015

Time	Topics
08:30 am To 10:15 am	PET/CT images to predict immunotherapy response in non-small cell lung cancer (NSCLC)
Tea Break	
10:30 am	

(Signature)
Principal

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10:30 am To 12:30 pm	Fusion power and define a role for the utilities in the fusion development process
Lunch Break	
01:30 pm To 03:00 pm	The neuro-imaging data, including CT, CTA, DSA, MRI, fMRI were input to 3dgo sczhry workstation for image fusion and 3D reconstruction
Tea Break	
03:15 pm To 04:00 pm	Apparent diffusion coefficient (ADC), fractional anisotropy (FA) and relative cerebral blood volume (rCBV)

The following members were present in the meeting and the syllabus and lesson plan for the faculty developme 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.	Ms H C Sateesh Kumar	Guest Speaker	

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5 Days FDP

On

“Multi modal Image Fusion”

19th January 2015 to 23rd January 2015

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 Giriappa, 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 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.

Topics Covered

- Introduction to different modalities available in image processing
- Software's available image registration and for extracting features
- Functional imaging technique with a high-resolution
- Classification algorithms available
- Implementation of projects on machine learning in the campus

Resource Persons:

Mr. 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

Address for Registration /Communication

Prof. Shilpa V :9538959760

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ACADEMIC YEAR 2014-2015

2014-15(EVEN)

List of participants and Attendance FDP on "Multi modal image fusion"
From 19th Jan 2015 to 23rd Jan 2015

Sl. No.	Name of the Faculty	19/01/15		20/01/15		21/01/15		22/01/15		23/01/15	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	S. Shobha	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	SHWETHA.G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Sangeetha.K.Siri	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	ANITHA.MURTHY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Shobha H	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Shidpa.V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Prathibha.P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Suma.V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Basavaraj's	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	Ransitha.B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	VisayaLakshmi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	Jayadev.O.B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	Karthik.N.C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	LANTI.A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	NANI.V	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	JayaprabhaV	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Ravishankarann	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	Saemitha.Maharaj	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19	Shobha.B.N	BNS	BNS	BNS	BNS	BNS	BNS	BNS	BNS	BNS	BNS
20	Sandhya Rani	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	Geetha.C.R	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22	SATHISH MURTHY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
23	Sudha.M.S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
24	Agalya P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Department of Electronics and Communication

"FDP Report on "Multi modal Image FUSION"

Date: 19.01.2015 to 23.01.2015

Time: 9 AM to 4 PM

Venue: DSP and HDL Lab, Faraday block, SCE

RESOURCE PERSONS PROFILE:

1. Name: Mr. H C Sateesh Kumar

Current Status: Assoc. Professor

Department of ECE

Sai Vidya Institute of Technology, Bengaluru.

Qualification B.E., M.Tech., Ph.D.

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 Indiansociety for Technical Education.

2. Name: Prof. Agalya P

Current status: Assoc. professor

Department of ECE, SCE, Bangalore

Qualification B. Tech. M.Tech. (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.

Department of Electronics and Communication

Summary Report:

Faculty development programme was conducted on Multi modal image fusion by the department of Electronics and Communication from 19th Jan 2015 to 23rd Jan 2015. The FDP programme was inaugurated by the principal. The first day session started with introduction to different modalities available in image processing and also its applications by Prof. H C Sateesh Kumar. The second day the session started with software's available image registration and for extracting features. The session was followed by hands-on on feature extraction and installation of software.

The third day session started with fusion of combination of a functional imaging technique with a high-resolution structural imaging modality to provide more comprehensive information by Prof. Shobha Sand hands-on was provided in the lab.

The Fourth day session started with classification algorithms available for classification of medical images. And introduction to artificial neural network. In the afternoon hands-on was provided.

On the last day of the FDP the session followed by question and answers where faculties interacted on questions about implementation of projects on machine learning in the campus. They also discussed about future in the domain. The FDP was useful and well appreciated by faculties. The session was concluded with vote of thanks and distribution of certificates to the participants.



Mr. H C Sateesh kumar delivering speech to participants

Chairman
Academic committee

Head of the Department
Electronics & Communication
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Certificate

This is to Certify that Mr./Mrs. Vani. V of has participated and successfully completed Five days Workshop on "Multi modal image fusion" from 19th January to 23rd January 2015 organized by the Electronics and Communication Engineering Department, Sapthagiri College of Engineering.


HOD

Dept. of ECE



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