

**Dr . D. Janaki Sathya**  
**Assistant Professor**  
**Department of Electrical & Electronics Engineering**  
**PSG College of Technology, Coimbatore – 641 004**  
**e-mail: *djs@eee.psgtech.ac.in***



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## **EDUCATION**

### **DOCTORATE**

(July/2014)

**KARPAGAM UNIVERSITY**

**“Certain Investigations on Dynamic Contrast Enhanced Breast MR Image Analysis Using Soft Computing Techniques”. Area of Research: Medical Image Processing**

### **POSTGRADUATE**

(May/2008)

**M.E – APPLIED ELECTRONICS**

**PSG COLLEGE OF TECHNOLOGY**

**ANNA UNIVERSITY**

### **UNDERGRADUATE**

(APRIL/2003)

**B.E (ECE)**

**SRI RAMAKRISHNA ENGINEERING COLLEGE**

**BHARATHIAR UNIVERSITY**

## **EXPERIENCE**

**13-06-2003 to 31-11-2009**

**LECTURER**

**PSG COLLEGE OF TECHNOLOGY**

**1-06-2016 to till date**

**ASSISTANT PROFESSOR**

**PSG COLLEGE OF TECHNOLOGY**

## **COURSES HANDLED**

### **UNDERGRADUATE**

- Computer System Architecture
- Operating systems
- Data Structures

- Basics of Electrical and Electronics Engineering
- Relational Database Management Systems
- Electronic Devices
- Communication Engineering
- Data Communication and Networks
- Computer Networks
- Microprocessor and its Applications
- Microprocessor and Microcontrollers
- Embedded Systems
- Advanced Computer Architecture
- Genetic Algorithms and its Applications
- Artificial Neural Networks and its Applications
- Digital Image Processing
- Personal Computer Systems

## RESEARCH AREAS

- Medical Image Processing and Analysis
- Digital Image Processing
- Artificial Intelligent Systems
- Optimization Algorithms

## PUBLICATIONS

### INTERNATIONAL JOURNALS

- [1] Janaki Sathya D, Geetha K. A novel clustering based segmentation of multispectral magnetic resonance images. *International Journal of Advanced Research in Computer Science*, 1(4), 337-342, 2010.
- [2] Janaki Sathya D, Geetha K. An optimized preprocessing decision for multispectral MRI- based applications. *International Journal of Advanced Research in Computer Science*, 2(4), 386-391, 2011.
- [3] Janaki Sathya D, Geetha K. Comparative study of different edge enhancement filters in spatial domain for magnetic resonance images. *AMSE Signal Processing and Pattern Recognition Journal*, 54(1), 30-43, 2011.
- [4] Janaki sathya D, Geetha K. Development of CAD system based on enhanced clustering based segmentation algorithm for detection of masses in breast DCE-MRI. *International Journal of Computer Science Issues*, 8(5), 378-387, 2011.
- [5] Janaki sathya, D, Geetha K. Development of intelligent system based on artificial swarm bee colony clustering algorithm for efficient mass extraction from breast DCE-

MR images. International Journal of Recent Trends in Engineering and Technology, 6(1), 82-88, 2011.

- [6] Janaki sathya D, Geetha K. Quantitative comparison of artificial honey bee colony clustering and enhanced SOM based K-means clustering algorithms for extraction of ROI from breast DCE-MR images. International Journal of Recent Trends in Engineering and Technology, 8(1), 51-56, 2013.
- [7] Janaki Sathya D, Geetha K. A comparison of certain soft computing techniques for segmentation of ROI from breast DCE-MR images. Karpagam Journal of Computer Science, 7(3): 116-128, 2013.
- [8] Janaki Sathya D, Geetha K. Mass classification in breast DCE-MR images using an artificial neural network trained via a bee colony optimization algorithm. ScienceAsia, 39(3): 294-305, 2013. (**IMPACT FACTOR : 0.398**)
- [9] Janaki Sathya D, Geetha K. Experimental investigation of classification algorithms for predicting lesion type on breast DCE-MR images. International Journal of Computer Applications, 82(4): 1-8, 2013.

#### **NATIONAL CONFERENCES**

- [1] Janaki sathya D. Unsupervised segmentation of multispectral magnetic resonance images. National conference on “Applied Electronics in Industrial Automation, AIEEA 08”. Organised by Department of Electrical and Electronics Engineering, Dr.Mahalingam College of Engineering and Technology, Pollachi, on April 11<sup>th</sup> 2008.
- [2] Janaki sathya D. Breast MRI lesion classification using backpropagation neural network. Karpagam University 4<sup>th</sup> Annual Research Congress (KUARC) 2012, 29-30 November 2012.
- [3] Janaki sathya D. Automatic mass classification of lesions in breast DCE-MR images. Karpagam University 5<sup>th</sup> Annual Research Congress (KUARC) 2013, 7-8, November 2013.

#### **WORKSHOP ORGANISED**

- Organized a Two-Day workshop on Embedded Systems on 10<sup>th</sup> and 11<sup>th</sup> March 2007 in PSG College of technology, Coimbatore.

#### **REVIEWER FOR THE INTERNATIONAL JOURNAL**

- IET Image Processing Journal.

## **SEMINARS / CONFERENCES ATTENDED**

- [1] “Learn with LabVIEW” one day seminar, organised by Virtual Instrumentation Centre, PSG College of Technology, Coimbatore, 3<sup>rd</sup> February 2005.
- [2] “Awareness of IBM Tivoli Software” two days Faculty Development programme (FDP), Sponsored by IBM India Pvt.Ltd. Conducted at Computer Science and Engineering Department of PSG College of Technology, during March 16-17, 2007.
- [3] “Advances in Computer Networking”, two days Faculty Development programme (FDP), Sponsored TATA Consultancy Services (TCS), Conducted at Computer Science Engineering Department of PSG College of Technology, during September 14-15, 2007.
- [4] National conference on “Applied Electronics in Industrial Automation, AIEIA 08” Organised by Department of Electrical and Electronics Engineering, Dr.Mahalingam College of Engineering and Technology, Pollachi, on April 11<sup>th</sup> 2008.
- [5] “Relationship with Students and Teachers” One Day Workshop Organised by PSG College of Technology, on December 27<sup>th</sup> 2008.
- [6] Eight National Conference on Advanced Computing and Applications (NCACA '09) organised by Department of Computer Science and Engineering of PSG College of Technology, Coimbatore, during February 7-8, 2009.
- [7] Two day workshop on “Matlab Programming and Image Processing” organised by Department of Information Technology, Karunya University, Coimbatore, during September 2-3, 2010.
- [8] Karpagam University 4<sup>th</sup> Annual Research Congress (KUARC) 2012, 29-30 November 2012.
- [9] Karpagam University 5<sup>th</sup> Annual Research Congress (KUARC) 2012, 7-8 December 2013.

## **SPECIAL LECTURES DELIVERED**

- [1] Invited Speaker on “Intelligent system for Medical Image Analysis” at “One day workshop on Image Processing”, Department of Computer Science and Engineering, PSG College of Technology, Coimbatore ( April 20, 2008).
- [2] Invited Speaker on “LabVIEW Basics I and Basics II” at “5 day training program on LabVIEW 7.0 Basics I and Basics II”, organised by PSG College of Technology, Coimbatore from 3<sup>rd</sup> May 2004 to 7<sup>th</sup> May 2004.
- [3] Invited Speaker on “LabVIEW Basics I and Basics II” at “5 day training program on LabVIEW 7.0 Basics I and Basics II”, organised by PSG College of Technology, Coimbatore from 2<sup>nd</sup> May 2005 to 6<sup>th</sup> May 2005.

