

**Dr. K.M.PRABUSANKARLAL**

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Scholar: <https://scholar.google.co.in/citations?user=zTh7DqkAAAAJ&hl=en>

## Education

- ❖ **Ph.D., Electronics**, Bharathiar University (Highly Commented, July 2017)
- ❖ **UGC-NET for Lectureship (Electronic Science)** June 2009
- ❖ **M.E., (Computer Science and Engineering)**, Vinayaga Missons University, Salem, 81.5%, Year-2007.
- ❖ **M.Phil., Electronics**, Bharathidasan University, Trichy, 74%, Year- 2005.
- ❖ **M.Sc., Applied Electronics**, PSG College of Arts & Science(Bharathiar University), Coimbatore, 74%, Year 1998.
- ❖ **B.Sc., Electronics**, Cheran Arts & Science College(Bharathiar University), Erode, 68%, Year 1995.

## Professional Experience

**Associate Professor & Head**, Department of Electronics & Communication, K.S.Rangasamy College of Arts & Science, Tiruchengode (March 2011 to Present).

**Assistant Professor**, Department of Electronics & Communication, K.S.Rangasamy College of Arts & Science, Tiruchengode (June 2001 to February 2011).

**Lecturer**, Department of Electronics, Muthayammal College of Arts & Science, Rasipuram (July 1998 – May 2001).

**Coordinator**: Planning & evaluation committee, K.S.Rangasamy College of Arts & Science.

**Member**: Senate Member, Periyar University, Salem.

**Member**: Academic Council, Finance Committee, Curriculam development and Internal Quality Assurance Cell of K.S.Rangasamy College of Arts & Science.

**Member**: Board of Studies of Periyar University, Salem, Manonmanium Sundaranar University, Tirunelveli, K.S.Rangasamy College of Arts & Science, Tiruchengode, Selvam Arts and Science College, Namakkal, Sri Krishna Arts and Science College, Coimbatore,

**Life Member**: Indian Society for Technical Education

## Current Research Interests:

Ultrasound diagnosis of breast cancer, Segmentation of Ultrasonograms, Machine learning algorithms, Pattern recognition, and Water treatment using Dielectrophoresis.

## Research Publications

**2019**

Sankaranarayanan, A., Parsottambhai, M. D., Prabusankarlal, K. M., & Adesara, A. (2019). Filtration and removal of artificially contaminated food borne pathogens using dielectrophoresis. Materials Today: Proceedings.

## 2018

Prabusankarlal, K. M., Thirumoorthy, P., Manavalan, R. & Sivaranjani.R.(2018). Modified NLM model for despeckling ultrasound images using FCM clustering based pre classification and RIBM. *ICTACT Journal on Image and Video Processing*, 8(3), 1708-1715.

Prabusankarlal, K. M., Manavalan, R., & Sivaranjani, R. (2018). An optimized non-local means filter using automated clustering based preclassification through gap statistics for speckle reduction in breast ultrasound images. *Applied Computing and Informatics*, 14(1), 48-54.

## 2017

Prabusankarlal, K. M., Thirumoorthy, P., & Manavalan, R. (2017). Classification of breast masses in ultrasound images using self-adaptive differential evolution extreme learning machine and rough set feature selection, *Journal of Medical Imaging* 4(2), 024507 (Apr–Jun 2017)

## 2016

Prabusankarlal, K. M., Thirumoorthy, P., & Manavalan, R. (2016). Segmentation of Breast Lesions in Ultrasound Images through Multiresolution Analysis Using Undecimated Discrete Wavelet Transform. *Ultrasonic imaging*, 38(6), 384-402.

Sankaranarayanan.S, Prabusankarlal, K. M & Raja.S, Impact of different frequencies in the entrapment of bacterial pathogens from drinking water using Dielectrophoretic phenomena.*Journal of water chemistry and technology*.Volume 33, Issue 2, pp 117-122, 2016, ISSN: 1063-455X, Allerton- Springer, Ukraine.

## 2015

Prabusankarlal, K. M., Thirumoorthy, P., & Manavalan, R. (2015). Assessment of combined textural and morphological features for diagnosis of breast masses in ultrasound. *Human-centric Computing and Information Sciences*, 5(1), 1-17.

## 2014

Prabusankarlal, K. M., & Thirumoorthy, P. (2014). An Automated Segmentation Method for Tumor Detection in Breast Ultrasound Images.*Journal of NanoScience and NanoTechnology*, 2(1), 163-168.

Prabusankarlal, K. M., Thirumoorthy, P., & Manavalan, R. (2014). Combining clustering, morphology and metaheuristic optimization technique for segmentation of breast ultrasound images to detect tumors. *International Journal of Computer Applications*, 86(14).

Prabusankarlal, K. M., Thirumoorthy, P., & Manavalan, R. (2014). Computer Aided Breast Cancer Diagnosis Techniques in Ultrasound: A Survey. *Journal of Medical Imaging and Health Informatics*, 4(3), 331-349.

## 2013

Prabusankarlal, K. M., Thirumoorthy, P., Performance Analysis of Speckle Noise Filters for Medical Ultrasound Images, *Journal of Acoustical Society of India* 40 (4), 239-244.

## Editorial/ Reviewer

## **Editorial Board:**

Journal of Cancer Research Forecast  
Journal of Smart Construction Research

## **Reviewer:**

Journal of Biocybernetics and Biomedical Engineering, Journal of Biostatistics and Biometric Applications, Journal of Physical Science and Environmental Studies, Journal of X-Ray Science and Technology, Journal of Global Surgery.

## **International/ National Conferences**

- Organizing Secretary, National Level Seminar on Machine Learning in Robotics, K.S.Rangasamy College of Arts and Science, Tiruchengode, 14<sup>th</sup> March 2019.
- Organizing Secretary, National Level Hands on Training on "Smart Home and Industrial Automation using IoT with Arduino", K.S.Rangasamy College of Arts and Science, Tiruchengode, 14<sup>th</sup> March 2019.
- Presented Paper on "Recent trends in Image Processing" in the National Conference on Recent Trends in Electronics(NCRTE-2019) at Selvamm College of Arts & Science, Namakkal on 20<sup>th</sup> Feb 2019.
- Organizing Secretary, National Workshop on "Internet of Things: Arduino for Smart Cities" K.S.Rangasamy College of Arts and Science, Tiruchengode, 1<sup>st</sup> March 2018.
- Organizing Secretary, National Conference on "Recent advancements in Bio Medical Instrumentation: Impact on clinical diagnosis", K.S.Rangasamy College of Arts and Science, Tiruchengode, 1<sup>st</sup> March 2018.
- International Conference on Nano Electronic Science & Technology, Sri Vasavi College, Erode, 14<sup>th</sup> and 15<sup>th</sup> Feb 2013, Presented paper "An Automated Segmentation Method for Tumor Detection in Breast Ultrasound Images".
- International Symposium on "Macro and supramolecular architectures and materials" organized by the K.S.R College of Technology & GIST South Korea at Le Meridien, Coimbatore , 21<sup>st</sup> to 25<sup>th</sup> November 2012 (5 Days).
- Workshop on "Transforms: Continuous, Discrete and Applications" KSR College of Technology, Tiruchengode on September 12<sup>th</sup>, 2012.
- Faculty and Placement officers Training programme on students placements, Dr MGR College , Hosur, 9<sup>th</sup> to 11<sup>th</sup> October 2010.
- Seminar on Recent developments in microcontroller and embedded systems, KSG College of Arts and Science, Coimbatore, 15<sup>th</sup> and 16<sup>th</sup> Sep 2010.
- ICMR National Seminar on "Smart Medical Diagnosis systems using Image Fusion Technology" Indian Council for Medical Research, KSR College of Technology, 19<sup>th</sup> and 20<sup>th</sup> Feb 2010.
- Advisor for National technical Symposium, Anna University Coimbatore, 19<sup>th</sup> March 2010.
- Workshop on "Graphical system design in engineering Education", Centre for Wireless Networking, KSR College of Technology, 26<sup>th</sup> Feb 2009.
- Workshop on "Advancement in Digital Image Processing", KSR College of Engineering, Jan 2009.

- Seminar on “Recent trends in information security”, KSR College of Technology, Jan 2009.
- CSIR Workshop on “Embedded Controller & Applications” KSR College of Technology, Nov 2008.
- UGC National Conference on Nanotechnology, Erode Arts College, Erode, Aug 2008, Presented paper” Nano robots for medical applications”.
- National Workshop on Software Testing at Anna University, Coimbatore , May 2008.
- National Conference on “Recent Trends in Computer Science and Engineering”, Paper Presented “Wireless LAN Security requirements, Threads and Mitigation” KSR College of Technology, Feb 2008.
- National Conference on Acoustics, KSR College of Technology, Dec 2007.
- International Conference on “Advanced communications” at PSN College of Engineering, Paper presented “ FPGA Programming for Embedded SOC’s”, Feb-2007
- Training Program on “ Software Testing” ,KSR College of Arts& Science, Mar 2006.
- Conference on “Web Technology ”at Kamadenu college , Erode, Paper Presented “Service oriented architectures using .net framework ”, Feb 2006.
- National Seminar on Nanotechnology at KSR College of Technology, Jan 2006.
- National Seminar on “Advancements in Communications” at VLBJ College, Coimbatore, July 2005.
- Training Program on “Guidance and Career Counseling” ,TTTI , Chennai, Oct 2004
- Asia Pacific International Conference On Embedded SOC’s , IIS ,Bangalore, Aug 2004
- Training Program on “Micro teaching” , TTTI Chennai ,May 2003.
- ICBN ,International Conference Of Broad Band Networking ,Indian Institute of Science ,Bangalore, May 2003
- Workshop on E-Security, Anna University, Chennai, Jan 2002.

### **Text Books/ Chapters/ Lab Manuals Written**

Data Communication and Networking, (Text book- SIM Pattern), PRIDE, Salem.

Power electronics and VLSI Design (Text book- SIM Pattern), PRIDE, Salem.

Microprocessor and Optical Communication (Lab Manual-SIM Pattern), PRIDE, Salem.

Advanced Networks (Text book- SIM Pattern), PRIDE, Salem.

Analog And Basic Communication Lab, (Lab Manual-SIM Pattern), Pride, Salem.

### **Professional Summary**

#### **Subjects Taught at UG and PG level:**

- |   |                                    |
|---|------------------------------------|
| 1. Data Communication Networks.                   | 8. Advanced Networks               |
| 2. VLSI system Design and tools.                  | 9. Digital Computer Fundamentals   |
| 3. Computer Architecture.                         | 10. Advanced Microprocessors.      |
| 4. Microprocessors and interfacing.               | 11. Parallel Processing.           |
| 5. Microcontrollers and interfacing               | 12. Internet and Java Programming. |
| 6. Embedded systems.                              | 13. PC trouble shooting.           |
| 7. Digital, Fiber optic and Analog Communication. | 14. C Programming                  |

## Personal information

Date of Birth : 26.07.1975  
Sex : Male  
Community : OC  
Marital Status : Married  
Passport No : G3495432  
Father's Name : S.Mahadevan.  
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Karungalpalayam(PO)  
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