

**N.BALAKUMAR M.E., FUAMAE, AMUAAMP, MISEIS, AMUACEE, MPASS**  
 77/64, N.R.G.Street, K.K.Pudur (PO), Saibaba Colony,  
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**Objective:**

To work hard in competitive environment with best of my abilities and thus to scale new peaks in the education sector by expanding horizons of technical knowledge, managerial and creative skills, and there by accomplishing organization goals, the society and the individual.

**Academic Qualifications:**

Degree / Qualification	University\Board	Year	Percentage
<b>M.E. (Applied Electronics)</b> [Maharaja Engineering College] <b>University 3<sup>rd</sup> Rank</b>	Anna University of Technology	2009-2011	9.48(CGPA)
<b>B.E. (EEE)</b> [VLB Janakiammal College of Engineering and Technology] <b>First Class</b>	Anna University Chennai	2009	73%
<b>Diploma (DEEE)</b> [Sri Ramakrishna Mission Vidhyalaya Polytechnic College] <b>First Class With Distinction</b>	Department of Technical Education	2006	87.62%
<b>SSLC</b> [T.A.Ramalingam Chettiar Higher Secondary School]	State Board	2003	89%
<b>FUAMAE (Fellowship)</b>	Engineering Domain	2016	Merit Basis

**Academic Experience:**

Period	Position held	Organization	Years
June 2011 to Till Date	Assistant Professor/ EEE	Tamilnadu College of Engineering , Karumathampatti, Coimbatore-641659	5.2 Years

**Subjects Handled:**

- ❖ Digital signal processing
- ❖ Digital logic circuits
- ❖ Microprocessor and Microcontroller
- ❖ Linear integrated circuits and applications
- ❖ Electronic devices and circuits
- ❖ Circuit theory
- ❖ Electric circuits and electron devices
- ❖ Basics of electrical and electronics engineering
- ❖ Measurement and instrumentation
- ❖ Electrical machines
- ❖ Control system
- ❖ Total quality management

**Electives Studied:**

- ❖ Internetworking Technology
- ❖ Neural Network and Fuzzy Logic Control
- ❖ Low power VLSI design
- ❖ Biomedical Instrumentation
- ❖ ASIC Design
- ❖ Industrial Electronics

**Areas of Interest:**

- ❖ Electrical Machines
- ❖ Low power VLSI
- ❖ Digital signal processing
- ❖ Embedded Systems
- ❖ Power Electronics
- ❖ Circuit theory and analysis
- ❖ Microprocessor and microcontroller

### **Software Knowledge:**

- ❖ Proteus
- ❖ Keil
- ❖ MATLAB
- ❖ Tanner EDA tool
- ❖ PSPICE Software
- ❖ Micro C
- ❖ MP lab IDE
- ❖ PSIM

### **Projects Undertaken:**

- ❖ **Energy Efficient KOGGE Stone Adder**

**Description:** Energy Efficient KOGGE Stone Adder is a VLSI logic circuit which is used for high speed operations with reduced area and power.

- ❖ **Transformer less Boost Inverter for Single Phase Photovoltaic System**

**Description:** This system is concerned with the combined design of transformer-less high-efficiency topology and voltage booster mechanism with low-input voltage requirement for grid-connected photovoltaic system.

- ❖ **Microcontroller Based Intercom System with 24 Extension Line**

**Description:** This system deals with the design of a low cost intercom system by which 24 lines (users) could be interfaced within the hardware using microcontroller.

### **UG Projects Guided:**

- ❖ Border Surveillance using GSM
- ❖ Bio-medical application using GSM
- ❖ Automatic Sensor Based Irrigation system
- ❖ Phase angle control for Compensators
- ❖ RF based Energy monitoring System
- ❖ Design of Resonant Convertor for Heaters
- ❖ Energy theft Control System
- ❖ Boost Convertor for Solar System
- ❖ Road level crossing system

### **Academic Excellence:**

- ❖ Achieved University third rank during PG Studies
- ❖ Secured second mark during final year of Diploma studies
- ❖ Got centum in Mathematics-2 during Diploma studies
- ❖ Attained second mark in final examination of ninth standard
- ❖ Conquered second mark in final examination of eighth standard
- ❖ Accomplished first mark in final examination of seventh standard
- ❖ Exam cell coordinator from 2011
- ❖ Time table coordinator from 2012
- ❖ AICTE coordinator from 2015
- ❖ Anna university coordinator from 2015
- ❖ Association coordinator from 2014
- ❖ Symposium coordinator from 2014

### **Extra-Curricular Activities:**

- ❖ Balakumar N 2005, 'Training on Pumps and Motors', Two-week In-plant Training Programme at Best Engineers Pumps Private Limited, Coimbatore.
- ❖ Balakumar N 2005, 'CADian and PC Schematic El automation software', National Level Seminar conducted by CAAD Centre, Coimbatore.
- ❖ Balakumar N 2007, 'Self Esteem' National Level Seminar conducted by VLB Janakiammal College of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2007, 'DSP Algorithms & Implementations' National Level workshop conducted by VLB Janakiammal College of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2008, 'Fuzzy Logic Applications using MATLAB' National Level seminar conducted by VLB Janakiammal College of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2008, 'Second Prize winner at Treasure Hunt – (Non-technical) event' in National Level Technical Symposium conducted by VLB Janakiammal College of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2008, 'Second Prize winner at Technical Quiz' in National Level Technical Symposium conducted by VLB Janakiammal College of Engineering and Technology, Coimbatore.

- ❖ Balakumar N 2008, 'Recent Trends and Developments in Bio-Medical Engineering' National Level workshop conducted by VLB Janakiammal College of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2011, 'Energy Efficient KOGGE Stone Adders' National Conference conducted by Maharaja Engineering College, Coimbatore.
- ❖ Balakumar N 2011, 'High Performance KOGGE Stone Adders for Low-Power Applications' National Conference conducted by Velalar College of Engineering and Technology, Erode.
- ❖ Balakumar N 2014, 'MiPower Power Systems Simulation Software' National Level Workshop conducted by Kathir College of Engineering, Coimbatore.
- ❖ Balakumar N 2015, 'The rise of Renewables: Integration Challenges and Opportunities' One-week Faculty Development Programme conducted by Government College of Technology, Coimbatore.
- ❖ Balakumar N 2015, 'Alternate Energy Research Contest' International Level Inter-Disciplinary Design Contest conducted by Government College of Technology, Coimbatore.
- ❖ Balakumar N 2015, 'Modelling and Simulation of Power Electronic Convertors using Simulink' National Level Workshop conducted by PSG College of Technology, Coimbatore.
- ❖ Balakumar N 2015, 'Solar Photovoltaic Design' National Level Workshop conducted by Bannari Amman Institute of Technology, Sathyamangalam.
- ❖ Balakumar N 2015, 'Industrial Drives and Automation using Matlab and Labview' National Level workshop conducted by Government College of Technology, Coimbatore.
- ❖ Balakumar N 2015, 'Applications of MATLAB and publications using Latex in Research' Faculty Development Programme conducted by PPG Institute of Technology, Coimbatore.
- ❖ Balakumar N 2016, 'Literature and comparative survey of future wireless communication' National Conference on Recent Trends in Electrical Science conducted by Tamilnadu College of Engineering, Coimbatore.

- ❖ Balakumar N 2016, 'Embedded system design using Atmel Atmega XPLD mini 168PB and ARM based SAM D21' Two days professor summit conducted by Coimbatore Institute of Technology, Coimbatore.
- ❖ Balakumar N 2016, 'A Novel Study of and Comparative Survey of Future Wireless Communication' International Conference conducted by Karpagam institute of technology, Coimbatore,
- ❖ Balakumar N 2016, 'Application of mathematics in image analysis and computer vision' National Level Workshop conducted by Jansons Institute of Technology, Coimbatore.
- ❖ Balakumar N 2016, 'Principles of digital signal processing' One week Faculty Development Programme conducted by KPR Institute of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2016, 'Introduction to Research: Preparation of Research Proposal and Journal Articles ' National Level Workshop conducted by KPR Institute of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2016, 'Advancement in power electronics and drives' Two days Faculty Development Programme conducted by JCT College of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2016, 'Introduction to Research: Preparation of Research Proposal and Journal Articles ' National Level Workshop conducted by KPR Institute of Engineering and Technology, Coimbatore.
- ❖ Balakumar N 2016, 'Hands on Training on Solar PV Panel-Parameter Calculation, Testing and Installation' National Level Workshop conducted by Kumaraguru College of Technology, Coimbatore.
- ❖ Balakumar N 2016, 'PV Solar Power Plant Design and Optimization' National Level Workshop conducted by KPR Institute of Engineering and Technology, Coimbatore.

**List of Publications:**

- ❖ Balakumar N. and Boselin Prabhu S.R., “Literature and Comparative Survey of Future Wireless Communication”, *Galaxy: International Multidisciplinary Research Journal*, 4(1), January 2016.
- ❖ Elavarasan S. and Balakumar N., “A Research on Wireless Power Transmission using Distinguished Methodologies”, *International Journal of Research and Engineering*, Volume 3, Number 7, July 2016.
- ❖ Boselin Prabhu S.R. and Balakumar N., “Bio-Medical Application of Wireless Power Transmission System”, *International Journal of Research and Engineering*, Volume 3, Number 7, July 2016.
- ❖ Balakumar N. and Dr. Boselin Prabhu S. R., “Real-World Wireless Power Transmission under Various Scenarios and Considerations”, *International Journal of Innovative and Applied Research*, Volume 4, Issue 7, pp. 24-29. July 2016.
- ❖ Dr. Boselin Prabhu S.R. and Balakumar N., “Biologically Inspired Clustering Mechanism in Dense Distributed Wireless Sensor Networks”, *International Journal of Engineering Studies and Technical Approach*, Volume 2, Number 7, July 2016.
- ❖ Ramya G. Devasugan S.M and Balakumar N., “Different Sinusoidal PWM Scheme for Matrix Converter”, *International Research Journal of India*, Volume 1, Number 12, August 2016.

**Strengths:**

- ❖ Adaptability to a new unexpected environment
- ❖ Quick recovery from failures
- ❖ Effective team player

**Summary of Qualifications:**

- ❖ Highly gifted research and teaching aptitude
- ❖ In-depth knowledge of various techniques and approaches applicable at the project level
- ❖ Ideal knowledge about the job duties of an academician and to perform them efficiently

### **Membership in Professional Bodies:**

- ❖ International Association of Engineers (MIAENG)
- ❖ Computer Science Teachers Association (MCSTA)
- ❖ Professional Association of Software Systems (MPASS)
- ❖ Society of Digital Information and Wireless Communication (MSDWIC)
- ❖ International Society for Environmental Information Sciences (MISEIS)
- ❖ Internet society (MISOC)
- ❖ Indian Academy of Health and Fitness (MIAHF)
- ❖ International Technology Engineering Educators Association (MITEEA)
- ❖ Universal Association of Mechanical and Aeronautical Engineers (FUAMAE)
- ❖ Universal Association of Arts and management professionals (AMUAAMP)
- ❖ International society for research and development (MISRD)
- ❖ Universal Association of Computer and Electronics Engineers (AMUACEE)
- ❖ Science and Engineering Institute (MSCIEI)

### **Editorial Board Member / Reviewer:**

- ❖ International Journal of Recent Trends in Engineering and Research (IJRTER)
- ❖ International Journal of Emerging Technology and Advanced Engineering (IJETAE) - Reviewer
- ❖ International Journal of Electronics and Communication Technology (IJECT)
- ❖ International Research Journal of Latest Trends in Engineering and Technology (IJRLTET)
- ❖ International Journal of Engineering Trends and Technology (IJETT)
- ❖ International Journal of Engineering Research and Technology (IJERT) - Reviewer
- ❖ International Journal of Current Engineering and Scientific Research (IJCESR)
- ❖ The Research Journal (TRJ) – Reviewer
- ❖ Global Research and Development Journals (GRD) – Reviewer
- ❖ Journal of Progressive Research in Modern Physics and Chemistry (JPRMPC)



**Hobbies and Interests:**

- ❖ Browsing
- ❖ Playing cricket
- ❖ Listening music

**Personal Details:**

Date of Birth : 06-06-1987  
Gender : Male  
Marital Status : Single  
Mobile Number : 9940716279  
Father's Name : Mr.R.Natarajan  
Mother's Name : Mrs.S.Rajamani  
Languages Known : English, Tamil &Telugu  
Domicile : Tamilnadu  
Nationality : Indian  
Address : 77/64,N.R.G.Street,K.K.Pudur (PO),  
Saibaba Colony, Coimbatore-641 038

**Declaration:**

I hereby declare that the information furnished above is true to the best of my knowledge and I bear the responsibility for the correctness of the above mentioned particulars.

**Place:** Coimbatore

**Date:**

**(N.BALAKUMAR)**