# Ajit Bhimrao Ladgaonkar

M .Tech Embedded Systems VIT University, Vellore (TN) Contact No :(+91)8220363372

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### **Career Objective:**

- To achieve inevitable success, in competitive environment of the corporate world, by devotion and smart work.
- To passion for the job and strong will to fulfill management expectations following ethical values.

#### **Academic Credentials:**

Educational Qualification	Board/ University	Year of Passing	Percentage	Rank /Class obtained
M. Tech (Embedded Systems)	VIT University, Vellore (TN)	2014	Pursuing(Current CGPA 8.46)	22 <sup>th</sup>
<b>BE</b> (E&TC Engineering)	University of Pune	2014	70.00%( <b>CGPA 7.60</b> )	First class with Distinction
<b>TE</b> (E&TC Engineering)	University of Pune	2013	62.66%	First class
SE(E&TC Engineering)	University of Pune	2012	63.00%	First class
<b>FE</b> (E&TC Engineering)	University of Pune	2011	73.00%	First class with Distinction
HSC (12 <sup>th</sup> Science)	Maharashtra State Board Of Secondary	2010	82.83%	First class with Distinction
<b>SSC</b> (10 <sup>th</sup> )	And Higher Secondary Education	2008	92.30%	First class with Distinction

## **Project Details:**

• "Implementation of Cypress PSoC5, CY8C55, for ECG Monitoring System" [10<sup>th</sup>Aug.,-15<sup>th</sup> Oct., 2014] The project emphasizes the deployment of an ubiquitous, Analog and Mixed Signal (AMS) based VLSI technology for embedded system design, wherein precise detection of Bio potential and monitoring of ECG signal, in real time, on computer monitor is realized. The static reconfigurability of the on-chip resources is ensured. I worked as a **Principal Investigator** with 85% contribution for design and implementation of both hardware and firmware.

## • "Artix7FPGA based Implementation of Ratio Histogram" [10th Feb.,-19th April, 2015]

The project is based on the use of an innovative FPGA based technologies for Image Processing. Promisingly featured Artix7FPGA device is availed for present design. Emphasizing reconfigurability of the device, the project is successfully carried out and the results of implementation regarding Ratio Histogram are interpreted. I worked as a **Main Investigator** with about 80% contribution in configurability of the device and implementation of the same.

# • "Implementation of Analog and Mixed Signal Based technology for Industrial Application Using BLDC Motor" [20<sup>th</sup>Aug.,2013,-15<sup>th</sup> May,2014]

The project was sponsored by Post Graduate Department of Electronics, S. M. College Akluj (MS). It reveals the suitability of Mixed Signal Based VI SI Technology for industrial implementation

It reveals the suitability of Mixed Signal Based VLSI Technology for industrial implementations. The Project emphasizes the deployment of Cypress PSoC5 for controlling of operation of industrially important Brushless DC (BLDC) motor. The project work is carried for final year (BE) of under graduate course. I worked as a **Principal Investigator** with 85% contribution for design and implementation of both hardware and firmware.

# • Development of AVRATmega32L based Smart Wireless Sensor Network for Polyhouse Applications.[20<sup>th</sup>Feb.,2013,-15<sup>th</sup> May,2013]

The project is based on revolutionary field "Wireless Sensor Network (WSN)". It is the realization of deployment of Electronic Technologies for High-Tech Agriculture. Based on Zigbee technology, ensuring IEEE 802.15.4 standards, the WS nodes have been designed for monitoring of the polyhouse environmental parameters such as Temperature, humidity, light intensityetc, depicting Site Specific Variability (SSV), to ensure precision agriculture. The results are demonstrated on dedicatedly designed GUI. I worked as a **Principal Investigator** and carried out the project work of design, implementation and interpretation of the results as well.

#### **Award and Prizes:**

- 1. **Best Paper Award** at **10**<sup>th</sup> **International SET Conference** organized by VIT University, Vellore on 5<sup>th</sup> and 6<sup>th</sup>May, 2015. **Paper Title :** "Artix7FPGA based Implementation of Ratio Histogram".
- 2. **Best Paper Award** at **9**<sup>th</sup> **International SET Conference** organized by VIT University, Vellore on 10<sup>th</sup> and 11<sup>th</sup> November,2014 **Paper Title**: "Implementation of ECG Monitoring System using CY8C55"
- 3. **Best Paper Award** at 9<sup>th</sup> **International SET Conference** organized by VIT University, Vellore on 6<sup>th</sup> May 2015 **Paper Title :** "Mixed Language Processing: A Way to Improve English Pronunciation"
- 4. **Best Paper Presentation Award,** at **UGC sponsored National Conference** on Emerging Technologies for Sustainable Developments (NCET-2013) jointly organized by Dept of Electronics, Shivaji University, Kolhapur and KIT College of Engineering Kolhapur during27<sup>th</sup> and 28<sup>th</sup>December, 2012.**Paper title :**ARM microcontroller based an embedded system designing for measurement of soil moisture
- 5. Best Paper Presentation Award, at UGC and IEEE SSCS & CASS sponsored National Conference on Advances in Wireless Sensor Network and its Applications organized by P. G. Department of Electronics, S. M. College, Akluj. DistSolapur (MS) during 12<sup>th</sup>& 13<sup>th</sup> December, 2014. Paper Title: Analog And Mixed Signal Based System on Chip for ECG Monitoring

#### **Publications:**

- A. B. Ladgaonkar and B. P. Ladgaonkar, "Mixed-Signal Based SoC Design for Environment Temperature Measurement", National Journal of Science Information ISSN:2229-5836 (2012) 201.
- A.B. Ladgaonkar, A. M. Pawar and B. P. Ladgaonkar, "Development of arm microcontroller based an embedded system for measurement of soil moisture", SPEED Journal of Research in Electronics (ISSN:2349-8226) (2014) 1-4.
- A.B. Ladgaonkar, P. Balsundar, V. Konde and S. Purushothaman, "Analog And Mixed Signal Based System on Chip for ECG Monitoring", Proceed. of UGC IEEE CASS & SSCS Conf. NCAWSNA-2014., SPEED the Journal of Research in Electronics, (ISSN: 2349-8226) (2015) 8.
- A.B. Ladgaonkar, S. N. Patil and B. P. Ladgaonkar, "Development of Mixed Signal Based System-on-Chip for Brushless DC Motor Controlling", Proceed. Conf. NCAEIA-2014 Ferguson College, Pune (ISBN: 978-93-5174-783-3) (2014) 53.
- A.B. Ladgaonkar, A. M. Pawar and B. P. Ladgaonkar, "Development of arm microcontroller based an embedded system for measurement of soil moisture" Proceed. National Conf. NCRIGE-2013 organized by Post Graduate Department of Electronics Brijlal Biyani College, Amarawati (2013) 406.

#### **Core Proficiency:**

- Expert in development of project based on Artix7 FPGA.
- Expert in embedded system development with Mixed Signal PSoC from Cypress Semiconductor, USA.
- Expert in designing ARM-CORTEX M0(Nuvoton)
- Development of Zigbee technology based WSN.
- Expert is embedded design with Atmel, Intel, AVR and ARM microcontrollers.

#### **Proficiency Computer languages:**

- Development with IDE: Kiel microvision4, Codevision AVR, MicroC, VIVADO,
- Real Time Operating Systems: VxWorks, CooCoxCoOS
- Programming Languages : C/C++, Embedded C, Linux, VHDL, Verilog, PSoC creater 2.1,
- Design and Simulation tools: VB, Labview, Proteus, Protel, Eagle.

#### **Co-Curricular Activities:**

- Former, Co-Secretary, Student Forum sponsored by "IETE", New Delhi, Pune Chapter
- Active member of 'VOICE' (Vedic Oasis for Inspiration, Culture and Education), Pune
- Participated in Innovative program organized by Pune City Police through "Incredible India Club"

### **Personal Details:**

• Father's Name : BhimraoPandurangLadgaonkar.

Permanent Address : AMRUT, A/P.Akluj, Malewadi Tal. Malshiras, Dist. Solapur (MS)-413 101

Date of Birth : 2<sup>nd</sup> February, 1993

Language Known : English, Hindi & Marathi.

• Marital Status : Single

Nationality/Religion : Indian Hindu Maratha

• Interest & Hobbies : Watching Sci-fi Movies, making friends, Reading, R & D work.

#### **Declaration:**

I do hereby declare that the above information is true to the best of my knowledge.

Place: Vellore

Date: Ajit Bhimrao Ladgaonkar