**RESUME**

Rajesh Soundrikar

B.E. (Electronics) M. Tech (Electronics appearing)

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**PROFESSIONAL OBJECTIVES**

* To apply effectively my knowledge of Electronics & Embedded Software for improving the global competitive advantage of my organization, with total dedication to the spirit of excellence.

**PROFESSIONAL WORK EXPERIENCE**

BE (Electronics), M. Tech (Electronics appearing) with more than four and half yearof experience in Embedded software development and hardware design.

* Work at Design Innovation Centre (DIC) at Indian Institute of Information Technology Design and Manufacturing Jabalpur as a Project Design Research Fellow (from 28/08/2019 till continue).

* J.D College of Engineering Nagpur (from 21/07/2017 till 21/02/2019) As Assistant Professor and R&D Team (Electronic and Telecommunication Department).
* EMBEDDEDGALAXY TECHNOLOGIES Nagpur (from 1/3/2014 to 30/6/2015 and 1/2/2016 till 1/07/2017) Embedded Software Developer and Designer.

-Responsibilities: Product specific Software design, Module Design and development and involvement MCU selection

- Driver development for arm7/8051 microcontroller and application development of embedded software.

- Verify designs for their functional design specifications, reliability.

- Maintain designs of existing products.

- Project documentation for final release to clients.

 -Responsible for Software developed with individual project.

 -Verify software functionality as per project requirements

* Shree Vitthal Education and Research Institute Pandharpur (1/7/2015 to 30/11/2015) Research Associate.

-Responsibilities: purchasing instrument on micro-fabrication lab

-Developing on JAL automation project under R&D as team leader.

-Developing on IEI project under seed fund in R&D as team leader.

* Analogues Technologies Pvt. Ltd NANDED (From 1/4/2011 to 15/1/2014) Embedded Software Developer

-Responsibilities: Product specific Software design, Module Design and development and involvement MCU selection.

 -product design on RFID based library management in college library.

 -software design.

* KDK COLLEGE Of ENGINEEARING NAGPUR (1/9/2010 till 31/3/2011) as assistant professor (Adhocbased).

**Certificate course form Big Data University (IBM)**

* Introduction to Data Science.
* Machine Learning with Python.
* Python for Data Science.
* Introduction to Machine Learning With sound.

**Achievement/Awards**

* GATE qualified (2011 valid up to 2013) with 90.44 percentile.
* Embedded workshop training organized as trainer in engineering college.
* Two funding project sanctioned form IEI (Institute of Engineer India) under R&D of SVERI (poly) Pandharpur.
* Two year teaching assistantship provide with MHRD scholarship of SGGSIE&T Nanded.
* Fellowships provide form Design Innovation Centre at IIIT Jabalpur sponsored by MHRD GOI.
* IBM badges winner as Python Data Scientist certificate course from initiative IBM.
* IBM badges winner as Machine learning with python certificate course from initiative IBM.

**TECHNICAL SKILLS**

* Development Languages: Embedded C, Assembly,C language,C++ ,VHDL, Python
* Microcontrollers :
* Microprocessor 8085,8086.
* 8-Bit Architecture: Microchip PIC 16F,18F, Intel 8051/52,
* 32-Architecture:16\32Bit Architecture ARM7(LPC2148 TDMI7),ARM7(LPC2364 TDMI7),
* Interfacing all external peripheral device like keyboard, LCD, stepper motor, all sensor like LM35,HSM-200, Seven Segment.
* **RTOS:** uCOS-II.
* Communication Protocols: UART,I2C, and SPI.
* Communication Standards: RS232
* Communication device interface GSM,GPS,BLUETOOH, Zigbee, RFID, RF Tx, RF Rx
* **Compiler :**
* KeilμVision3 - 8051series ,ARM7 series
* **Debuggers & simulators**:
* KeilμVision3 – 8051/52 , Atmel 8051IDE - 8051series microcontrollers
* MPLAB - PIC 16F,18F and dsPIC33 series microcontrollers.
* Proteus – simulator for 8051 micro controllers& ARM7
* PCB schematic & layout : proteus ARES,ExpressPCB software
* **Education Details**:

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| --- | --- | --- | --- | --- |
| Examination | Year | Board/ University | Agr. Marks | Class |
|  M.Tech (Electronics) | 2014 | SGGSIE&T Nanded (Autonomous Government College in Maharashtra) India | 7.0 CGPA | FINAL THESIS SUBMITTED |
| B.E.(Electronics) | 2010 | SRTMU NANDED | **70.44** | Distinction |
| H.S.C. | 2005 | Nagpur Div. Board | **64.33** | First class |

**PROFESSIONAL SOCIETY MEMBERSHIP**

* Member of IAENG –(MN-207335)
* Member of ISRD-4150906014
* Member of IFERP-

**PROJECT PERFORMED**

* **LOW COST GSM SMS BASED HUMIDITY AND TEMPERATURE MONITORING AND CONTROL ARM7 CONTROLLER BASED IRRIGATION SYSTEM**

**ENVIROMENT:**LPC2148 PROCESSOR(ARM7), Keil u-vision software, proteus simulation software, humidity sensor HSM-35 and LM-35.

**Responsibility:** understanding the arm7 processor and understanding GSM modem programming and developing the software code for desired system.

* THE GSM modem communicate with arm7 thought AT COMMAND
* understand the sensor interfacing and working of sensor
* the total system is work on low power .
* **HOME AUTOMATION USING INTERNET OF THINGS (IOT BASED) .**

**ENVIROMENT:** LPC2148 PROCESSOR (ARM7), Keil u-vision software, proteus simulation software.ESP 8266 WIFI module,

**Responsibility:** software design and hardware development with team size 4 under Research and Development selected INSTITUION of INIDIA,

The project is used to controlling device though internet using wifi module esp8266**.**

* **HOME AUTOMATION CONTROLLING USING GSM DEVICE AND 8051RD2 PROCESSOR**

**ENVIROMENT:** microcontroller 89C52RD2 ,Keil u-vision software, proteus simulation software, LCD,GSM MODEM-900.

**Responsibility:** The software Design and hardware development for this system with team size 2. I have interface wireless modem with microcontroller for controlling home devices though anywhere the network is available.

* **ENERGY MANAGEMENT SYSTEM USING ZIGBEE MODULE**

**ENVIROMENT:**LPC 1248,89C52RD2,ZIGBEE MODULE,LCD,POWER FACTOR IC

 KEIL-UVISION, ISIS and ARES Proteus software,

**Responsibility:** software design and hardware development with PCB board developed.

* **Bluetooth control brushless dc motor using ARDUINO UNO and 89C52RD2.**

**ENVIROMENT:** 89C52RD2,Bluetooth Module,LCD, KEIL-UVISION,Proteus software, ARES software.

**Responsibility:** software design and hardware development and PCB board developed.

* **WORKSHOP ATTENDED**
* Participate in a Two-Day workshop on **INTRODUCTION TO MACHINE LEARNING** Conducted by Indian Institute of Technology Kharagpur on 16th and 17th December,2017
* Participate in a Design Innovation Centre Exhibition and meeting at IIT Delhi behalf of IIITDM Jabalpur
* **PAPER PUBLICATIONS**
* Paper titled “**Design of Embedded system of wireless CAN Proxy system using ARM7 (LPC2364)”**is publishedin International Journal for Engineering Application and Technology (e-**ISSN 2321-8134**), 2015.
* Paper titled “**Design and Implementation of** **Industrial Disaster Management System”** is publishedin VIBGYOR Multidisciplinary Research Journal Offline (ISSN Number—22774491) In Volume 5 No. 1 Edition February 2018.
* Paper titled “**Home Automation Using WI-FI Network Through Cloud”** is publishedin VIBGYOR Multidisciplinary Research Journal Offline (ISSN Number—22774491) In Volume 5 No. 1 Edition February 2018.
* Paper titled “**Home Automation Using IOT”** is publishedin VIBGYOR Multidisciplinary Research Journal Offline (ISSN Number—22774491) In Volume 5 No. 1 Edition February 2018.
* Paper titled “**IOT Based Patient Monitoring System”** is publishedin VIBGYOR Multidisciplinary Research Journal Offline (ISSN Number—22774491) In Volume 5 No. 1 Edition February 2018.
* Paper titled “**Future of VLSI Design: the FinFETS”**is publishedin JETIR, 2018.
* Paper titled “**MEMS Cantilever based 2:1 Multiplexer”** is publishedin JETIR, 2018.

**PERSONAL DETAILS:**

**Name** : Rajesh Rushiji Sondrikar

**Languages** : Marathi, Hindi, English.

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 Datta temple Nagpur-440009

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

Yours Faithfully,

**RAJESH SOUNDRIKAR**

 Date: