

**VARNA C PRAKASH**  
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### Profile Summary

**M.Tech in embedded systems from Amrita School of Engineering, Amrita University Coimbatore.**

Having sound knowledge of subjects like Microcontrollers & Processors and wireless sensor networks.

Competent in the field of development of a project within the restricted time and resource.

Proficient with project coordination activities involving planning, scheduling, application maintenance & enhancement

Education				
Qualification	Percentage /CGPA	Institution	University	Year of Passing
M Tech Embedded systems	7.28	Amrita School Of Engineering, Coimbatore	Amrita University	2015
B-Tech <i>Electronics and Instrumentation Engineering</i>	64.96	Federal Institute of Science and Technology, Angamaly	M.G University	2013
XII	78	Vidyodaya School, Thevakkal	CBSE	2009
X	87	Vidyodaya School, Thevakkal	CBSE	2007

### Skill Summary

- ✓ Programming Languages : C, MATLAB, Embedded C and familiar with assembly language.
- ✓ Controllers: : PIC 16F,ARM 7(LPC2148) , MBED board , Arduino
- ✓ Operating system : Windows 98,XP, Windows7/8, Android and familiar with linux
- ✓ Familiar with computer knowledge such as MS Office, MS Excel and MS Power point.
- ✓ Favourite Subjects : Wireless sensor networks, smart grid, C programming
- ✓ IDE and softwares : MPLAB, KEIL uVISION4, MBED Compiler, proteus simulator,ns2, Arduino IDE.
- ✓ Communication protocols : UART and RF communication
- ✓ Familiar with various robotic kits like lego, Spark 3, Firebird 4, icreate.

### Work Experience

Currently working as a junior software engineer at Chilton Refrigeration Pvt Ltd.

### Publications

Published a paper on "Communication Network on Real Time Data Collection in a Smart Micro Grid" in Elsevier Publication at International Conference on Power, Circuit and Information Technology, Chennai.

## Project Description

- **Wide Area Measurement System for Real Time Data Collection in a Smart Micro Grid**  
This project deals with the design of communication network and routing strategy for a five bus Smart Micro grid Simulator model with IEEE C37.118.5 standard and incorporating concepts of wireless sensor networks.  
**Hardware and Software Tools used:** Arduino Uno, Arduino IDE, ns2 and MySQL
- **Voice Controlled Wheel Chair**  
This project focuses on finding the shortest path to a destination for a static environment by giving the destination name as a voice command which is processed using Matlab  
**Hardware and Software used:** pic16F, proteus simulator and Matlab
- **Temperature Control Using PID Controller**  
In this project the temperature of a kettle was controlled using a PID controller where the set point can be set manually.  
**Hardware and Software used:** Arduino Uno, Arduino IDE
- **Automatic Power Consumption Management**  
The purpose of this project is to control the power consumption in places like hostel. When the power consumed in room exceeds the set value the power supply to that room will be automatically cut off and will only be restored after the reception of control message from the authority.  
**Hardware and Software used:** MBed board and MBed Compiler.
- **Closed Loop Fuel injection system for automotive system.**  
This project deals with the adjustment in the quantity of fuel injected into the engine based on the load requirements. The load on the engine is estimated from the sensors and correspondingly the fuel injected is increased .  
**Hardware and Software used:** Arduino Uno, Arduino IDE
- **Automatic Door Opening System using Biometric Sensor**  
In this project the automatic control of a door was done using finger print sensor which allows only authenticated personals to enter the room.  
**Hardware and Software used:** ARM 7(LPC2148), Keil uVISION4, Finger print sensor.
- **Temperature Control in a Room Using Fuzzy Logic**  
Depending on the current environment the temperature in a room was controlled based on the user preference using fuzzy logic  
**Hardware and Software used:** Arduino Uno, Arduino IDE
- **Bluetooth Controlled SCARA Manipulator**  
A prototype of SCARA manipulator which can be used instead of humans in hazardous places was created using Lego Mindstorm. This prototype can be controlled using a mobile via Bluetooth.

## Seminar Presented

### **Title: Embedding Synchronized Measurement Technology for Smart Grid Development.**

A Smart Grid in layman's term is power grid in conjunction with communication system. The key factor in this system is the synchronisation between various sub-systems. This can be taken care by use of GPS.

### Personal Attributes

- ✓ Strong analytical and problem solving skills
- ✓ Good communication skills
- ✓ Team player, able to handle pressure and willingness to learn.
- ✓ Good organizational skills, highly motivated, focused, hardworking and result oriented

### Extra-Curricular Activities

- ✓ Member of School Parliament Council
- ✓ President of School Nature Club.
- ✓ Part of the organising committee for “Bharatham” Cultural Fest at Federal Institute of Science And Technology, Angamaly.
- ✓ Part of the technical committee that organised an International conference at Amrita Vishwa Vidyapeetham, Coimbatore.
- ✓ Attended a three day workshop on smart grid “ National Workshop on Emerging Smart Grid technologies and Research Directions” at Amrita Vishwa Vidyapeetham, Coimbatore.
- ✓ Part of the technical committee in ANOKHA, Annual technical fest at Amrita Vishwa Vidyapeetham, Coimbatore.

### Personal Profile

Father's Name : P G Chil Prakash  
Mother's Name : Reena C Prakash  
Date of Birth : 13/12/1991  
Gender : Female  
Marital Status : Single  
Nationality : Indian  
Graduation : B.Tech in Electronics and Instrumentation from Federal Institute of Science and Technology, Angamaly.  
Hobbies : Cooking, Listening to Music, Glass painting and reading  
Languages Known : English and Malayalam  
Address : Chilton Villa, House Number: 160  
Mather Nagar  
South Kalamassery  
Cochin  
Ernakulam District  
Kerala - 682033

### **DECLARATION**

I hereby declare that the information furnished above are true to the best of knowledge and belief

VARNA C PRAKASH