# Pragathi Gajjala

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## Professional Summary

* 8+ years of experience in the field of **electronics and embedded systems**, worked as a Senior Technical Officer in Electronics Corporation of India Limited (ECIL), A Government of India (Department of Atomic Energy) Enterprise.
* Currently attending Kal Academy **Software Development - Deep stack program Bootcamp.**
* Experienced Engineer in complete product life cycle development of Power Supply Modules and **Microcontroller** based Digital Notch Indicators.
* Production of **Microcontroller** based Solid State Cockpit Voice Recorder.
* Work experience in the areas of discrete components and microcontrollers.
* Exposure to protocols and standards like **CAN, SPI, UART** etc.
* Good knowledge in usage of Function Generator & Cathode Ray Oscilloscope.
* Extensive experience in Qualification Tests (like EMI/EMC tests) and Documentation (Specifications, Schematics, BOMs, Inspection Procedures and Engineering Drawings).
* Good understanding of OOP concepts & Design Patterns.
* **Certified Internal Quality Auditor.**
* Managed the Technical Team and guided them in development and testing of the electronic products on the Production Floor.
* R&D in projects according to customer requirements and to improve efficiency.
* Worked closely with various vendors in procuring the materials for the Production Floor.
* Interacted with customers to gather the requirements and design inputs.
* Experienced in requirements gathering, functional gap analysis, solution design, integration, testing, implementation, documentation and knowledge transfer.
* Absolutely capable of working in a fast paced, dynamic, team-oriented environment.
* Excellent analytical and organizational skills, good communication skills, and ability to work in a team environment as well as an individual contributor.

## Education

* **Master of Engineering** in Digital Systems from Osmania University, India in 2011.
* **Bachelor of Technology** in Electronics and Communication Engineering (ECE) from JNTU University, India in 2005.

## Skills

**Compilers / Editors:** RIDE and KEIL IDE, XILINX EDK & ISE Design Tool  
**Programming Languages:** C, Embedded C, C#, Familiar with VHDL, C++ and JAVA  
**EDA Packages:** CADSTAR, ORCAD: Schematic Capture and PSPICE  
**Drawing Packages:** AUTOCAD  
**Operating System:** Windows, Familiar with UNIX and Linux  
**Microcontroller:** 8051

## Professional Experience

#### Employer : Electronics Corporation of India Limited *June 2011 – Jan 2015*

#### Project : Production of Power Supply Modules and Digital Notch Indicators

#### Role : Senior Technical Officer

**Description:** Responsible for planning, coordination and control of manufacturing Power Supply Modules for ship borne applications and Digital Notch Indicators for Locomotives.

**Responsibilities:**

* Overseeing the production processes.
* Making sure that products are produced on time and are functionally OK.
* Purchasing the material needed, Assembled PCBs Testing and Troubleshooting, Documentation, Module Integration, Functional Testing, Troubleshooting, Qualification Tests and Dispatch.
* Cost estimation.
* Being responsible for modules functionality
* Liaise among different departments, e.g. suppliers, purchase, assembly, Quality control.

#### Employer : Electronics Corporation of India Limited *June 2010 – June 2011*

#### Project : Microcontroller based Digital Notch Indicator for electric locomotive

#### Role : Technical Officer

**Description:** Design, Development, Prototype Testing, Cost Estimation and Production (full life cycle process) of Digital Notch Indicator for electric locomotive (Railway Application).

**Responsibilities:**

* Design ,Component Selection and Procurement , Generated Schematics , Prepared PCB layout and guidelines in circuit placement and routing, review the layout and check the netlist, System programming in Embedded C (Microcontroller interfacing RS-232, CAN, SPI), Assembled PCBs testing and troubleshooting, module Integration, Functional Test and Qualification tests. Documentation (Specifications, BOMs, Inspection procedures ATP and QTP, Test reports and Engineering Drawings: PCB Fabrication, PCB General Assembly/Component Layout and Module General Assembly).

#### Employer : Electronics Corporation of India Limited *June 2007 – June 2010*

#### Project : Power Supply Modules (Ship Borne Application)

#### Role : Engineer ‘C’

**Description:** Design, Develop, Prototype Testing, Cost estimation and Production of 6 types of Power Supply Modules.

**Responsibilities:**

* Prepared Specifications, Circuit Design ,Components Selection and Procurement, Generated Schematics, Prepared PCB layout and guidelines in circuit placement and routing, review the layout and check the netlist, Assembled PCBs Testing and Troubleshooting ,Prepared Wiring Diagrams ,Module Integration , Functional Test and Qualification tests: Burn-In, High Temperature, Low Temperature, Damp Heat, Tropical Exposure, Vibration, EMI/EMC, High Pressure, Shock and Impact as per JSS 55555. DOCUMENTATION :Specifications, BOMs, Inspection procedures ATP and QTP, Test reports and Engineering Drawings : Wiring , PCB Fabrication , PCB General Assembly/Component Layout and Module General Assembly.
* Design and Development of Test Jigs to test Individual PCBs and Integrated Module.
* Estimating the cost and arriving at Module Price.

**Project:** Instrumented Pipeline Inspection gauge and Calibration Pipeline Inspection gauge

* Generated Schematics for 14 types of PCBs, Prepared PCB layout and guidelines in circuit placement and routing, review the layout and check the netlist, Assembled PCBs testing.
* Documentation: BOMs, Individual PCBs Inspection procedures.

#### Employer : Electronics Corporation of India Limited *June 2006 – June 2007*

#### Project : Solid State Cockpit Voice Recorder (SSCVR)

#### Role : Graduate Engineer Trainee

**Description:** Responsible for production support and enhancements and troubleshooting issues.

**Responsibilities:**

* Functional testing and troubleshooting of Solid state cockpit voice recorder which records 4 channels of audio of 2 hours each.
* Design of Voltage monitoring circuit for use in the SSCVR.
* Study and implementation of Microcontroller based projects. Hands on experience with RIDE and KEIL compiler for C programming.
* Attended ARM microprocessor training.

#### Employer : Juno Online Services *Feb 2006 – June 2006*

#### Role : Trainee in Quality Assurance Team

**Responsibilities:** Software Manual Tester for United Online Services (UOL) an Internet Service Provider.