**Shilpa Baby**

**B.tech : Electronics and communication Engineering**

**E-Mail:** [**shilpabelenji@gmail.com**](mailto:shilpabelenji@gmail.com)

**Industry Experience: 6.4 yrs.**

**Mobile: +919500846205**

**Embedded software developer.**

**DOMAIN SKILL SET:**

* Technical/domain expertise in embedded development for 6.4 yrs.
* Knowledge of Linux, FreeRTOS, VxWorks, ERCOS OS.
* Experience on IPC, 12C and TCP/IP protocols.
* Good understanding of Unified diagnostic protocol– UDS.
* Understanding of CAN, MOST protocols for automotive domain.

**TECHNICAL SKILL SET:**

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| --- | --- |
| Operating System | Windows XP/7/8, Linux, FreeRTOS, VxWorks. |
| Languages | Embedded C programming, LUA scripting. |
| Requirement System | Doors, Elvis, Siebel, Perforce, WinSCP , SecureCRT. |
| Tools | Trace Client, Eclipse, Visual Studio, DST (Diag Stress Tool). |

**Client Domain: Automotive Aug 2015 - Aug 2016**   
**Project: Audi – MIB2\_Diagnostics.**

**Organisation: Wipro Technologies**

Project Description: Diagnostics team deals with development and maintenance of diagnostics application which handles communication between diagnostic tool (Tester) and ECU’s using UDS protocol (Unified diagnostics services).These diagnostic services will help tester reach root cause of problems occurring in vehicle . The team’s primary task is implementation and testing of diagnostics service.

**Responsibility :**

* Understanding of system and mapping new components into diagnostics services.
* Basic testing of developed modules using TSE (Test sequence editor).
* Implementation of newly requested services.
* In addition, was responsible for GUI development (visual c++) of tool delivered.

**Client Domain:** **Networking Aug 2016 – jan 2018  
Project : ALCATEL Networking switches.**

**Organisation: Wipro Technologies**Project details: Working with development team for Alcatel switches.  
Team deals with development and sustenance of Kingfisher and Kite switches at system level.  
**Responsibility :**

* Understanding of system level issues reported and providing enhancement or fix accordingly.
* Bug and vulnerability analysis and fixing which is reported in implemented networking services ( system, L2/L3)
* CLI (Command line Interface) generation and enhancement.
* Transport layer and system level task understanding and modification.

**Client Domain:** **Automotive Feb 2018 – Mar 2021  
Project : SCR device , Exhaust device drivers.**

**Organisation: Robert Bosch Engineering India**Part of Exhaust funtion team -SCRDev which is responsible for development of urea dosing system.The urea dosing system , exhaust gas aftertreatment system (Denoxtronic-DNOX) reduces the NOx emissions of Diesel vehicles to the levels required by EURO5/6 and US07 emission regulations. For the control of dosing system separate ECU available (Dosing Control Unit), which is programed to actuate and control the entire exhaust gas aftertreatment system.  
DNOX- system components under SCRDev funtion includes:

Tank level sensor ,Pressure sensor, Dosing module ,Reverting valve, Pump motor with pump,Pressure Line, Suction Line, Supply module heater.

**Client Domain:** **Networking Mar 2021– Sept 2021  
Project : ALCATEL Networking switches.**

**Organisation: Wipro Technologies**Project details: Working with development team for Alcatel switches (7.X.X and 8.X.X switches).

Responsibility :

Federal Information Processing Standards (FIPS) 140 is a mandatory standard for the protection of sensitive or valuable data within Federal systems, was in the team to achieve FIPS certification for the alcatel switches.

* Implemented Automated Cryptographic Validation Protocol (ACVP) protocol in code base to support a new National Voluntary Laboratory Accreditation Program (NVLAP) testing scope at the National Institute of Standards and Technology (NIST).
* FIPS Validation through ACVP tool was done.

**Client Domain:** **Healthcare Oct 2021 – Present  
Project : MAC600 ECG unit**

**Company: NeST Digitial**Project details: Working with development team for General E;ectric (GE).  
Team deals with development of MAC600, a ECG device from GE.

**Responsibility :**

* Understanding the hardware schematic and configuration for the heterogeneous multi core processor (ARM- Cortex m4 and ARM- Cortex m7).
* Driver implementation (NOR Flash and NAND flash driver) for the new board.
* Acquisition of raw ECG data and signal processing to be done for the received data.

**TRAINING:**

* **Course Duration : 6 Months**
* **Institute: Vector India – Bangalore**
* **Subjects: C, Embedded C, 8051, TCP/IP, Linux, RTOS.**
* **Course Details:** The course included practice of Basics of C and Embedded C programming. Study of 8086 and 8051 micro controller architecture and Assembly Language Programming. Practice of Linux Systems Programming in C with details into file I/O operations, multi-processing, signal handling, IPC, Server-Client communication programming.

**Academic Mini project**

* Project: **Boat Trim & Stability System.**
* Duration: 1 month
* Front end used: **water level sensors**.
* Back end used : **8051 microcontroller**

Designed and prototyped boat trim and stability system. This is accomplished by varying or adjusting the amount of water in the water tanks designed for the purpose.

**Industrial training**

**BSNL -**Regional Telecom Training Centre, Trivandrum:-

Study of basic telecommunication systems, attended Industrial training program on the same.

**Seminar**

Innovative Electronics:

The seminar was on recent innovative ideas on electronics. Ideas that can

Change attitudes, lives and education. Electronic eye, building blocks that

Blink and Beep and electronic sketching were included.

**Education**

* B.tech from MGUCE, Kerala in 2014 with 7 pointCGPA (out of 10)
* 12th from ARSB (CICSE), Kerala in 2010 with 71%.
* 10th from ARSB (CICSE), Kerala in 2008 with 76%.

**Extra-curricular activities**

* Classical Dancer.
* Active participant and winner in many cultural events.
* High school and Higher Secondary ‘Kalathilakam’.
* Branch head of inter college tech fest Infuce 2k13 conducted by MGUCE.
* Active IEEE member.
* College class representative.
* Active participant and A grade scorer in Sargodhayam (State level university fest).

**Personal Profile:**

Name: Shilpa Baby

Date of Birth: 31-01-1992

Father’s name: Dr.Baby Joseph

Mother’s name: Elsamma Baby

Gender: Female

Languages Known: English, Malayalam, and Tamil.

Nationality: Indian

Present Address: Chunakpura House, Kaitharam (po), Ernakulam, Kerala.

Permanent Address: Elenjimattom House, Melampara (po), Kottayam, Kerala.