

Career Outline

To work in an educational organization, which provides me a challenging atmosphere, where I can utilize and improve my interpersonal and technical skills and contribute to the growth of the Organization.

Career Overviews

- An enthusiastic and competent professional with proficient **3.3 Years** of experience in teaching domain of Electronics and communication engineering .
- Strong expertise in **C programming, Embedded C, RTOS** Project Development/Management, capability in debugging with tool like **STRACE , GIT & GDB** Debugger.
- Proficient and Skilled on 8-bit ,32-bit microcontrollers like **8051, ARM7** and **Cortex-M4**, expertise in **UART, I2C, SPI**, communication protocols, worked on low level device drivers like **GPIO, ADC, RTC, PWM, Timers**. Basic knowledge on **CAN** protocol.
- Experience in handling Software Testing Life Cycle.
- Good Understanding of Linux kernel module programming and various debugging methodologies.
- Good understanding of System Boot up, Hands-on experience on Boot Loaders (Uboot).
- Possessing good Knowledge on Porting Linux to an ARM platform.
- Handling tasks of developing, debugging, and integrating embedded software to meet the requirements.
- Strong Ability to learn Domain Knowledge related to the application in a short period of time.
- Good communication/ operation & maintenance/ management/ root cause analysis/ problem solving skills.

Career Path

- Currently working as **Asst.profesor in ELLENKI group of institutions Hyderabad** from January 2014 to till date.

Academics

- **M.TECH** (Embedded Systems) from Ellenki college of Engineering & Technology, Hyderabad with **78.38 %**, during 2012-14 under JNTU-Hyderabad.
- **B.TECH** (ECE) from Ellenki College of Engineering & Technology, Hyderabad with **61.68%**, during 2007-11 under JNTU-Hyderabad.
- Intermediate (M.P.C) from APSWR Jr COLLEGE with **77.5%**, during 2005-07 under B.I.E.
- S.S.C from APSWRES with **83.6%**, during 2004-05 under B.S.E.

Technical Proficiency

- Programming Languages : **C, Embedded C**
- Operating Systems : **Windows 7 / XP, Linux.**
- Software tools : **MDK- Keil microvision4, GNU tool chain.**
- Microcontrollers : **8051, TM4C 123G (Cortex M4) AM335X BBB(Cortex A8).**
- Protocols : **UART, I2C, SPI, and Basics of CAN.**
- Low Level Device drivers : **ADC, EEPROM, TIMER, Watchdog, RTC, PWM, and LCD, etc.**

Projects Summary:

Project 1: Smart Automatic Filling System.

- Role** : Design, coding and testing.
Languages : Embedded C.
Tools : MDK-Keil microvision4.
Processing Unit : ARMCortexM4(TM4C 123G).
RTOS : TN Kernel.
Description : This project is Automatic system which is to maintain accuracy in terms of weight and objects by the sensor values .the heart of the project is conveyor belt. The conveyor belt is controlled by PWM accordingly. The weight into voltage can be converted by the load cell that can be handled by the ADC.and we have develop the control system for operate the entire system as per their requirement.
My Responsibilities :
- Developed code and debugging for ADC & PWM Driver Functionalities.
 - Developed ISR to serve the Interrupt in RTOS.

Project 2:Industrial security system.

- Role** : Software development & testing.
Languages : Embedded C.
Tools : GNU Tool Chain, ARM GCC Cross Compiler.
Processing Unit : TM4C 123G,IR sensor,matrix keypad,UART,LCD.
Description : This project is focused to maintain the security in an industry at the entrance. IR sensor is used to detect the motion of a person and the person is asked to enter the password. An authorized user can get the entry if password matches with the authenticated password else buzzer will be turned on with entry of three incorrect passwords. Data of entry will be sent to PC terminal through UART.
Responsibilities:
- Developed device driver for IR sensor, UART.
 - Done Unit testing of this software module.
 - Debugging the issues and fixing them.

Personal Dossier

- Name : Y. L. Rao.
- Date of birth : 1-7-1990.
- Sex : Male.
- Nationality : Indian.
- Marital Status : Single.
- Strengths : Confidence, hardworking & Positive thinking.
- Language Known : English, Telugu, and Understand Hindhi.

Declaration:

I hereby declare that the above information is true to the best of my knowledge. I am also confident of my ability to work in a team.

Place: Hyderabad

[Y L Rao]