

## ANUJA WANKHEDKAR

Embedded Software Engineer at Wipro  
B.E in Computer Science.

+918153074783  
anujawankhedkar04@gmail.com

### CAREER OBJECTIVE

Targeting assignments in Embedded System Development/SDLC, Kernel /System Programming with a reputed organization to deliver effective solutions for complex technical requirements.

### PROFILE SUMMARY

*BE (Computer Science) offering nearly 6+ years of rich experience in*

- **Project Execution**   -**Embedded Firmware Development**   - **Linux Kernel / System programming**
- **Requirement Analysis - Software Development/ Unit Testing**   - **Technical Support/ Troubleshooting**
- Skills in **Embedded Software Development** entailing Requirement Analysis, Coding, Debugging, Implementation.
- Problem-solver with strong communication, analytical and inter-personal skills.

### NOTABLE ACCOMPLISHMENTS ACROSS THE CAREER

- Acquired **Technical Expertise in:**
  - **C, C++, Programming & Development, Linux Kernel Programming, embos(RTOS).**
  - GNU/Linux: **GCC**
  - Debuggers: **GDB, MPLABPICKIT 4**
  - **Software Development with Linux.**
  - Software Packages: MPLAB, VIM Editor, Android Studio, Visual Studio
  - Version Control System: GIT, SVN
  - Single board Computer: Raspberry Pi B+
- **Worked with:**
  - **Communication Protocols** like **Serial Peripheral Interface (SPI), I2C** (Inter-Integrated Circuit), Modbus and UART.
  - **IPCs (Inter-process Communication)**, Middleware.
  - Process Synchronization Techniques, System Calls, Memory Management.
- Basic knowledge of Data structure programming like Linked list.
- Knowledge about synchronization techniques like Semaphores, Mutex, Spin locks.

### PROJECTS

#### • MRI

Magnetic Resonance Imaging (MRI) is a medical imaging technology that uses strong magnetic fields and radio waves to produce detailed images of the body, commonly used for diagnosing various conditions.

Philips MRI Systems (0.6T, 3T, 7T) – Advanced medical imaging systems using strong magnetic fields to produce detailed internal body scans.

**Roles and Responsibilities:** Developed and integrated C++ code to support merge activities, ensuring seamless hardware–software integration and cross-platform compatibility.

**Skills used:** Embedded C, C++

**Device Used:** RTM, STM, Test Bay

- **NXPI\_DCNM**

NXPI\_DCNM is data center project. I was working with SNMP Component. SNMP is an application layer protocol that uses UDP port number 161/162. SNMP is used to monitor the network, detect network faults, and sometimes even used to configure remote devices.

**Roles and Responsibilities:** Involved in troubleshooting and debugging network management features.

**Skills used:** Embedded C

**Device Used:** NXOS Switch

- **AUP-DM**

AUP-DM is consisting various modules like BTS, vBSC and vMSC. vBSC intends to develop a virtualized Base Controller. It is porting the application which is tightly coupled with hardware to achieve virtualization of product/application.

**Roles and Responsibilities:** I am involved in Development as well as in troubleshooting area.

**Skills used:** Embedded C

**Device Used:** Virtual RPVM, Virtual RP

- **ROSEPOD**

Rosepod is an advanced automated system that provides a control environment suitable for an effective indoor farming. Rosepod is providing an alternative solution for traditional farming complications to achieve optimized yield independent of the external climatic factors.

**Roles and Responsibilities:** I was responsible to develop a Modbus library which is providing all required function definitions for master-slave communication through RS-485.

**Skills used:** Embedded C, Bare metal Software

**Device Used:** Driver and customized sensors through RS-485, PIC microcontroller

**Main Feature:** Providing all required function definitions for handle query request and for create response frame based on read or write operation.

- **SNEOS (camera)**

This project is about CCTV camera usage. My task here was to develop an application in C language to choose the camera with the help of unique Camera ID provided by camera vendor, this camera ID was forwarded to Camera driver(device file/driver application as an input, driver used to select the respected camera as per provided Camera ID. Camera was interfaced with Raspberry Pi.

**Roles and Responsibilities:** I was responsible to develop an application which provides the functionality of choosing among the CCTV cameras depending upon the respected camera Id provided by the respected camera vendor.

**Skills used:** Embedded C, XML, java

**Camera Used:** Neos Smart Cam

**Main Feature:** Live video Streaming

**Board Used:** Arm/Raspberry Pi B+ (model)

- **Implementing RTC DS1347 Driver based On SPI Bus**

RTC is real time clock which provides information about seconds, minutes, and hours of the day as well as it also gives information about day, month and year. This information can either be read from or be written to the RTC using the SPI interface.

RTC DS1347 is interface with linux x86 system via SPI Protocol. The information regarding time is fetched from RTC DS1347 via read operation implemented in the SPI Driver and is used for timing related purpose.

**Roles and Responsibilities:** I was responsible to modify the existing SPI driver written for RTC DS1347.

**Skills used:** Embedded C, Linux Device Driver, Linux Kernel Programming.

**Device Used:** RTCDS1347, Linux x-86

**Main Feature:** Getting Real time from the RTC DS1347

• **SILOM DELIVERY USER/DRIVER Application**

**USER APP:** This Project is providing services where users can select the product from the provider list and it will redirect to the cart page. The user can make payment on it.

**DRIVER APP:** This system provides order list and order details functionalities. Driver receives new order notification and accepts orders and also tracks the user and delivers the product in a time.

**Roles and Responsibilities:** I was responsible to develop the android application.

**Skill used:** XML, Java

**Main Feature:** social media login, Google location, payment gateway.

**TRAINING AND CERTIFICATION:**

- Embedded System from Vector India.

**KEY RESPONSIBILITIES HANDLED:**

- Design and develop the cost effective and well equipped plan.
- Finding the problems and suggest the best possible solution.
- Perform various duties as assigned.

**PERSONAL QUALITIES:**

- Good Conceptual, Analytical and Logical skills.
- Ability to work individually as well as in group environment.

**PERSONAL PARTICULARS:**

- **Date of Birth :** 8<sup>th</sup> January 1996
- Completed BE in Computer Science with 7.06 CGPA.
- **Language Known:** English, Hindi, Marathi, Gujarati
- **Address:** Flat No 806, B2, Bhayenderpada, Rumah Bali, Opp Lodha Splendora, Bhayandarpada, Thane, Maharashtra -400615

I hereby declare that the above information is correct, true and complete to the best of my knowledge and belief.

Yours faithfully  
Anuja Wankhedkar