



# SHIKHA CHANDRA

Embedded Systems Engineer

✉ shikhachandra141@gmail.com

☎ +91-7388994929

## Details

Current Address  
French Apartments, Sector  
16B, Greater Noida West,  
U.P.

Date of birth  
15/12/1997

Nationality  
Indian

## Core Skills

C/C++  
OOPS  
AVR & ARM  
Microcontrollers  
Data Structures  
LDRA & Software  
Testing  
Linux user-space and  
environment

## Key Software & Tools

- Visual Studio, GitHub, JIRA
- LDRA testing toolsuite (Unit testing, whitebox testing, regression testing, black box testing)
- Microcontrollers: ARM, AVR

## Profile Summary

Experienced Embedded Engineer with a strong background in developing and optimizing embedded firmware code based on ARM and AVR Microcontrollers.

Proficient in integrating sensors and wireless communication modules, enhancing device functionality and user experience. Knowledge in conducting unit, white box, black box, and regression testing using the LDRA tool suite. Adept at designing test cases, participating in code reviews, and advocating best practices in software development.

Core competencies include Embedded C, C++, ARM and AVR microcontrollers, RTOS, OOPS, Data Structures and IoT. Creative problem-solver with knack for developing innovative embedded systems. Skilled in programming, debugging, and collaborating with cross-functional teams to deliver reliable solutions. Excellent communicator who embraces challenges and continuously seeks to learn and improve.

## Employment History

### Embedded Engineer , UnivLabs Technologies Pvt Ltd.

Nov 2023— Present, Gurugram, Haryana

Located and fixed bugs within embedded firmware to quickly remedy performance issues.

write the firmware in the c language

Developed firmware for microcontrollers, enhancing device functionality and user experience.

Conducted unit, white box, black box, and regression testing using the LDRA tool.

design the test cases for the tool suite

Participated in code reviews, providing constructive feedback and advocating best practices in software development.

Integrated sensors and wireless communication modules into embedded systems, enabling advanced data collection and remote monitoring.

## Languages

English



Hindi



## Education

### **CDAC-Sunbeam Pune, PG-DESD**

Mar 2023 — Sep 2023, **Pune (Maharashtra)**

PG Diploma in Embedded Systems design and development.

### **MJP Rohilkhand University, B.Tech**

Aug 2015 — Jun 2019, **Bareilly (U.P)**

Bachelor in Technology in Electrical Engineering.

CGPA: 7.86

### **SJS Public School, Intermediate**

Mar 2015, **Raebareilly (U.P)**

Intermediate (+2) in Mathematics Stream (Physics, Chemistry, Mathematics)

GPA : 69.40

### **SJS Public School, High School**

Mar 2013, **Raebareilly (U.P)**

High School (10<sup>th</sup>)

GPA : 8.6

## Key Projects and Tasks

### **Projects at UnivLabs Pvt. Ltd.**

#### **1) LDRA testing**

Performed Unit testing, white box testing, MC dc coverage, black box testing, regression testing  
Project detailing of medical device Endovision camera

#### **2) LED LIGHT SOURCE MEDICAL**

In this tasks I have used the PWM for controlling light by varying the duty cycle on STM 32 board.

#### **3) MEDICAL DEVICE INSUFFLATOR**

Role: Firmware developer

Team Size: 4 Project Duration: 6 Month

In the project I have configured:

- 1) Configured the voice coil using DAC
- 2) Developing the solenoidal valve GPIO driver
- 3) Configuration of pressure sensor like Low pressure sensor, high pressure sensor using the ADC.
- 4) Configuration of the buzzer using PWM.
- 5) Configuration of the suction motor using the PWM.

## **Projects at Sunbeam – Pune**

### **Project Name: IOT based air pollution and noise pollution monitoring system**

Role: Sensor interfacing  
with the Microcontroller  
and data acquisition.

Team Size: 4, Project Duration: 1 Month

Designed and implemented an IoT-based Air Pollution and Noise Pollution Monitoring System as a key project. This system utilized sensors and data analysis algorithms to continuously measure air quality parameters such as CO2 levels, and ambient noise levels in real-time. Data was transmitted wirelessly to a central server, allowing users to access live pollution data through a user-friendly web interface or a mobile app. This project showcased my proficiency in IoT, sensor integration, and data analysis, highlighting my commitment to environmental monitoring and technology-driven solutions.

### **Area of Interest**

I am having interest in the field of Embedded Software Development and related technology and hence want to pursue for the same.