

ASHEESH KUMAR RAIKWAR

EMBEDDED FIRMWARE ENGINEER

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EDUCATION

B.TECH, INSTITUTE OF ENGINEERING AND TECHNOLOGY, LUCKNOW 2015 - 2019

 <https://www.ietlucknow.ac.in/> Electronics and Communication Engineering

PROFESSIONAL EXPERIENCE

GUARDHAT | EMBEDDED FIRMWARE ENGINEER

SEPT 2021 - PRESENT

 <https://www.guardhat.com/>

Role : Firmware Developer

SMART WEARABLES DESIGN

- > Firmware development for BLE, STF Alert, UWB RTLS, UWB Tracking, GPS Tracking, Alert and Notification.
- > RnD for Wearable design on ultra low power MCUs

BLE UWB RTLS nRF52 STM32 UART SPI I2C

SUNMINT ENERGY PVT. LTD. (REFLEXDRIVE) | EMBEDDED FIRMWARE ENGINEER

JAN 2021 - PRESENT

 <http://www.sunmint.in/>

Role : Firmware Developer

BLDC CONTROLLER, IOT LIQUOR DISPENSER, BATTERY CHARGER, VHF RADIO

- > Firmware development on stm32 based bldc controllers and monitoring parameter for motor tuning..
- > Developed Firmware for Particle IoT hardware, RFID Control.
- > Inbuilt Modbus(RS-485) communication Facility Multi mode Battery Charger for 110V Battery, 40 AH.
- > VHF Radio design and Testing.

STM32 Spectrum Analyzer Arm® Cortex®-M3 Arm® Cortex®-M4 Modbus UART SPI I2C

AVITR | EMBEDDED FIRMWARE ENGINEER

APRIL 2019 - MARCH 2021

 <https://www.avitr.co/>

Role : Firmware Developer

AVITR FOR WORKFORCE SAFETY AND AVITR FOR WORKFORCE AUGMENTATION

- > Avitr solution for Critical Asset Tracking, Lone Worker Application based on UWB RTLS, UWB Tracking, GPS Tracking, Alert and Notification, Incident Management.
- > Developed Firmware for Keypad, Accelerometer, Pushbuttons, Oled, STF Alert, Temperature and Pressure data over Zigbee communication for stm32 based boards
- > Firmware development for the transmission of UWB position data with Zigbee for two way communication.
- > Design and Deployment of wireless sensor network (WSN) communicate over Mesh multi-hop network architecture.
- > Firmware development for

UWB RTLS Zigbee Attollic TrueStudio STM32 UART SPI I2C

SKILLS

Programming Languages Embedded C, C, Python

Embedded Experience Arm® Cortex®-M3, Arm® Cortex®-M4, Arm® Cortex®-M0

Communication Protocols UART, MODBUS, I2C, USB, SPI, I2C, ZIGBEE, UWB

IDE's Atollic TrueSTUDIO, KEIL (Keil uVision5), STM32CubeIDE, STM32CubeMX, IAR Embedded Workbench, SW4STM32 System Workbench, Cocox, XCTU

Programers, Debuggers STM32CubeProgrammer, STM32 ST-LINK Utility, Segger Jlink, Segger Jflash, Hercules, Putty

MCU Series STM32F1 Series, STM32F0 Series, STM32F4 Series, ATmega328, ATmega8

Circuit Design KiCad, Fritzing