

BANUPRIYA.S

banupriyamenaka@gmail.com | 9042551528 | chennai |

PROFILE

Electronics and Communication Engineering graduate with a strong foundation in embedded system. Proficient in Embedded C programming and STM32 microcontroller development. Hands-on experience in both hardware and software project implementation. A collaborative and motivated fresher with strong problem-solving skill. Eager to begin a career as an Embedded Engineer and contribute to organizational success.

TECHNICAL SKILLS

- Programming Language:** C, C++, Embedded C
- Electronics:** Basic electronic component, PCB design (basic)
- Microcontrollers:** STM32 Cortex M4, PIC16F877A, 8051
- Communication Protocols:** UART, I2C, SPI
- Software & Tools:** STM32CubeIDE (Baremetal & HAL), MPLAB, Keil, Proteus, Altium

EDUCATION

B.E - Electronics and communication Engineering.

2020-2024

- M.A.M School of Engineering, Siruganur, Trichy
- CGPA - 8.55**

2018-2020

Higher Secondary Certificate (HSC)

- Government Higher Secondary school, Ranjankudi
- Percentage: 60%**

2018

Secondary School Leaving Certificate (SSLC)

- Government Higher Secondary school, Ranjankudi
- Percentage: 70%**

PROJECTS

Passenger Safety Alert Using Eye Blink Sensor

- I designed and implemented a driver safety system to monitor drowsiness using an **IR eye blink sensor**. The sensor was integrated with a microcontroller to detect abnormal blink patterns indicating driver fatigue.
- I developed **real-time signal processing and control using Embedded C** to ensure accurate and fast detection. Additionally, **buzzer and GSM modules** were implemented to provide audible alerts and send **emergency notifications** during drowsiness detection.

AES Encrypted UART Communication between STM32 Microcontrollers

- Designed and implemented **AES-encrypted UART communication** between **STM32** microcontrollers to ensure secure and efficient data transfer.
- Developed, **tested, and validated embedded firmware using Embedded C** for reliable, real-time, and encrypted serial communication with high data integrity.

INTERNSHIP

Shri vaari Electrical Pvt Ltd

- Hands-on experience in electrical **LT panel designing** at Shriram Electricals, including schematic preparation, component selection, and layout design.