



Karthik Jamalpur

Iot Engineer

PROFILE SUMMARY

A highly skilled and detail-oriented Electronics Engineer with a strong foundation in circuit design, embedded systems, and hardware development. Proficient in designing, testing, and troubleshooting electronic components and systems, including microcontrollers, sensors, and power electronics. Experienced in using industry-standard tools such as PCB design software (Altium, Eagle), programming languages (C, C++, Python), and communication protocols (I2C, SPI, UART).

EDUCATION

2021	B.Tech/B.E. Jawaharlal Nehru Technological University (JNTU)
2017	XIIth English
2015	Xth English

WORK EXPERIENCE

Nov 2023 - Present	Iot Engineer veramasa it solutions Design, code, and test sensors that enhance our products and transmit data for storing and analyzing.
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Projects

150 Days	ASYMMETRIC KEY IMAGE ENCRYPTION USING AES ALGORITHM Vulnerability of communication of digital image is an extremely important issue, particularly when images are communicated through insecure channels. To improve communication security to many cryptosystems have been introduced to image encryption. literature fails due to constant improvement in image encryptedecrypted standard and hackers aware of it. Most of the image encryption standard uses AES algorithm, which is symmetric and prone to virus. To provide better security to images our proposes model makes ise of Asymmetric key using AES
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PERSONAL INFORMATION

✉ Email	karthikjamalpur93@gmail.com
☎ Mobile	(+91) 9121980369
📅 Total work experience	1 Year 6 Months
🌐 Social Link	www.linkedin.com/in/ karthikjamalpur

KEY SKILLS

Python
PCB Designing
Electronics
C Programming Language

OTHER PERSONAL DETAILS

City	Hyderabad
Country	INDIA

LANGUAGES

- ENGLISH
- TELUGU
- HINDI

algorithm, which is an extension of the standard AES algorithm.

90 Days

Object Counting Machine

A counting machine using an ESP32 and an IR sensor works by detecting objects as they pass through the IR sensor's beam. The IR sensor consists of an infrared emitter and receiver; when an object interrupts the beam, it causes a change in the sensor's output signal. This change is detected by the ESP32, which processes the signal to increment a count. The ESP32 uses its GPIO pins to interface with the IR sensor and runs a program to count the interruptions. The count can be displayed on an LCD, OLED, or sent to a cloud platform for remote monitoring. This system is ideal for counting items on a conveyor belt, people entering a room, or any similar application.

110 Days

Temperature sensor

A temperature sensor can be integrated with an ESP32 using an ADS1115 analog-to-digital converter and an 8.2k resistor as a pull-up or voltage divider, depending on the sensor type. The sensor outputs an analog voltage proportional to the temperature, which the ADS1115 converts into a digital signal readable by the ESP32. The 8.2k resistor is typically used to create a reference voltage or stabilize the sensor's signal. The ESP32 processes this data, applies a calibration equation (based on the sensor's characteristics), and calculates the temperature. This setup is efficient for high-resolution temperature measurements due to the ADS1115's 16-bit precision.

COURSES & CERTIFICATIONS

- ☐ PYTHON
- ☐ C Programming
- ☐ PCB Designing