# **Embedded Software** devloper

(collage topper) Expertly crafted and highly efficient C++ embedded devloper.

CONTACT ME -

# About me

Collage topper in ECE, as an Embedded Software Developer, my primary focus is on crafting efficient and robust software solutions for embedded systems. Proficient in languages like C and C++, I navigate the intricate realm of microcontrollers and microprocessors, optimizing code for real-time processing and addressing resource constraints. Collaborating closely with hardware engineers, I ensure the seamless integration of software with embedded systems, enhancing functionality across various industries such as automotive, medical devices, consumer electronics, and industrial automation. My passion lies in pushing the boundaries of technology to create innovative solutions that elevate the performance



PASSION ->>/;

# Latest projects

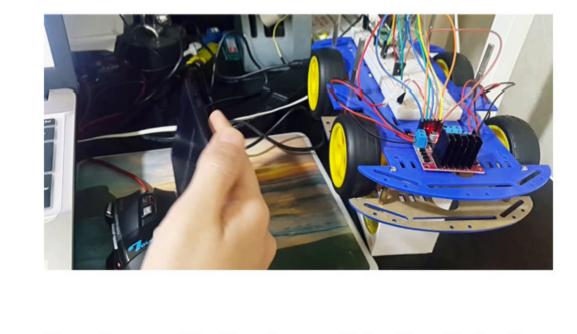
and capabilities of embedded devices.

I have devloped variety of projects using wide range of microcontrollers like Raspberry Pi, NodeMCU, Arduino, etc. The exprience of software ranges from C++, micropython, to devloping Android Apps and Games.



#### Automated Component analyzer for CNC's

An Automated Component Analyzer for CNCs is a sophisticated system designed to streamline and optimize the analysis of components within Computer Numerical Control (CNC) machines. This innovative tool automates the inspection and evaluation process, ensuring precision and efficiency in assessing the quality and integrity of machined parts. By leveraging advanced technologies, such as sensors and algorithms, this analyzer enhances manufacturing workflows, minimizes errors, and contributes to the overall reliability and performance of CNC systems.



### Raspberry Pi pico based Hygine Robot

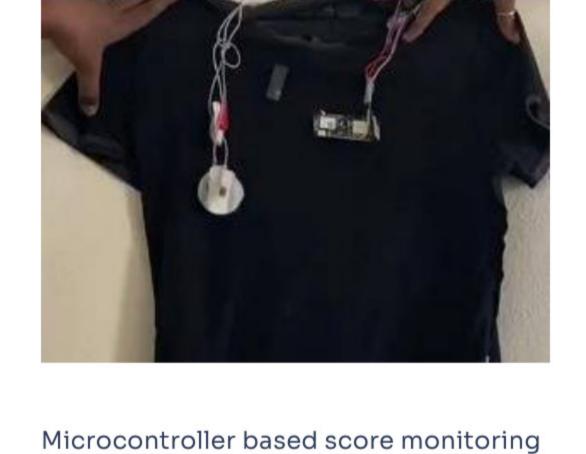
The Raspberry Pi Pico-based Hygiene Robot is a cuttingedge device designed to promote cleanliness and hygiene. Leveraging the power of the Raspberry Pi Pico microcontroller, this robot utilizes advanced programming in languages like MicroPython to execute tasks related to maintaining a sanitized environment. With sensors and actuators integrated, it navigates spaces, detecting and addressing hygiene concerns autonomously, making it a versatile and efficient solution for maintaining cleanliness in various settings.



### based on ESP8266 The Automated Switch Monitor and Control system

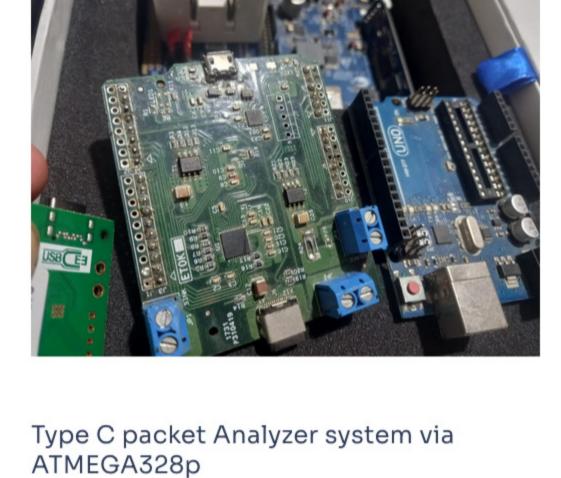
Automated Switch monitor and control

based on ESP8266 is a cutting-edge solution for efficient management of electrical devices. Leveraging the ESP8266 platform, this system enables seamless monitoring and control of switches through automated processes. By combining the versatility of ESP8266 with smart algorithms, it provides a reliable and user-friendly interface, offering enhanced convenience and energy efficiency in diverse applications such as home automation and industrial settings.



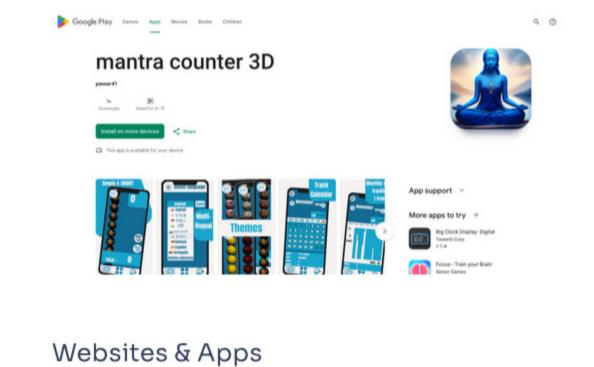
## using Machine Learning The Microcontroller-based score monitoring system

leverages Machine Learning algorithms to analyze and interpret performance data in real-time. Integrated with a microcontroller, this innovative solution dynamically tracks and evaluates scores, providing instant insights and predictive analytics. By merging microcontroller capabilities with Machine Learning, it offers a sophisticated and adaptive approach to score monitoring in diverse applications, from sports to educational assessments.



## The Type C Packet Analyzer system, powered by ATMEGA328p microcontroller, is a sophisticated tool

designed for in-depth analysis of USB Type-C communication. Leveraging the capabilities of ATMEGA328p, this system efficiently captures and decodes packet data, providing valuable insights into the communication protocols within Type-C devices. With its advanced features, it serves as a crucial resource for developers and engineers in debugging, optimizing, and ensuring the seamless functionality of USB Type-C interfaces.



# Few other software projects, I have developed website & applications using techlonogies Java, github, git, HTML,

CSS, Unity3D, Linux. \* mantra counter 3D app (click) \* HeroSuper (website) (click)

- \* The mala counter (app v0.1) (click) etc...

### Have working exprience for USBCEE electronics (Baglore based company), for a year. Following that I executed a startup in Pune for 2 years.

Exprience



Company sourcing USB-C

testers and programmers in

Korea and Australia.



#### implementing automation solutions for industrial &

domestic automation problems.

Education

After completing secondary education, I opt for Diploma in Electronics &



Diploma in ENC



Pune.

Degree in ENC Completed Degree in ENC, DY Patil Collage of Engg. Collage topper in Diploma, Research & Management, Zeal Polytechnicd, Pune.

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