

Ritik Vaishnav

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EDUCATION

B.E. in Electronics & Electrical Engineering , <i>M.B.M University Jodhpur</i>	2021 – 2025
12th (PCM) , <i>K.S. Lodha Public Sr. Sec. School Falna</i>	2019 – 2020



SKILLS

Programming Languages C, C++, Python	Server-based Sensor Data Monitoring ThingSpeak, Blynk IoT
Libraries OpenCV	Serial Protocols I2C, UART
Microcontrollers Raspberry Pi Pico [RP2040], ESP32 [Espressif]	Softwares DaVinci Resolve (Video Editing), KiCAD, TinkerCAD

PROJECTS

PaperPerspective 	03/2024
<ul style="list-style-type: none">Implemented Perspective Transformation in real-time, eliminating the need for camera or whiteboard setups.Utilized OpenCV and pyvirtualcam.	
Autonomous Rover with Real Time Video Feedback 	07/2022
<ul style="list-style-type: none">Integrated an ESP32 Camera with a Raspberry Pi Pico-driven fast line-follower rover.Facilitated seamless real-time video streaming through a Live Web Server.Optimized PID control parameters for enhanced accuracy.	
Multiplayer Game using Processing and Raspberry Pi Pico 	07/2022
<ul style="list-style-type: none">Developed a 2-player Ping Pong Game with Processing and RPi Pico using Arduino IDE with manual PWM controlled joystick and a 7-segment display.	

EXPERIENCE

Participant , <i>eYRC'23, E Yantra IIT Bombay</i> 	09/2023 – 01/2024
Worked on the theme 'GeoGuide' Completed 4 Tasks out of 6 working on the core of ML Algorithms, Image Processing, Remote sensing, GIS, Shortest Path Algorithm, Wireless Communication.	
Mentor (Embedded Systems and Robotics Club) , <i>ESRC MBM</i> 	06/2023 – 07/2023
Shared all what I learnt about Electronics and Programming during my time at ESRC under the guidance of Dr. Alok Singh Gahlot Sir.	

EXTRACURRICULARS

Filmmaker and Editor , <i>Pixellens: Film & Photography Club, MBM University</i>	03/2022 – present
Worked on multiple creative projects while constantly focusing on learning various aspects of cinematography and editing. Telling stories 30 frames per second.	