



CAM MOVER

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1. ABSTRACT

The Cam Mover project aims to create a device for moving a camera using the ESP32-CAM, controlled via a server connected to the internet. The system utilizes image processing from the ESP32-CAM to detect objects and move the camera in situations where direct access to the camera is not possible, within the camera's field of view. The object detection functionality will be implemented using Python, while the camera movement control and web server interface will be programmed using Arduino IDE. All of this will be uploaded to the ESP32-CAM.

The results can be viewed on the server at <https://192-168-4-1.com>. In terms of hardware, a 12V 80 RPM DC gear motor is installed, with wires connected to a BTS7960 motor driver. The motor driver's ports are then linked to the ESP32-CAM, allowing control of the camera's movement through the ESP32-CAM system.

2. INTRODUCTION



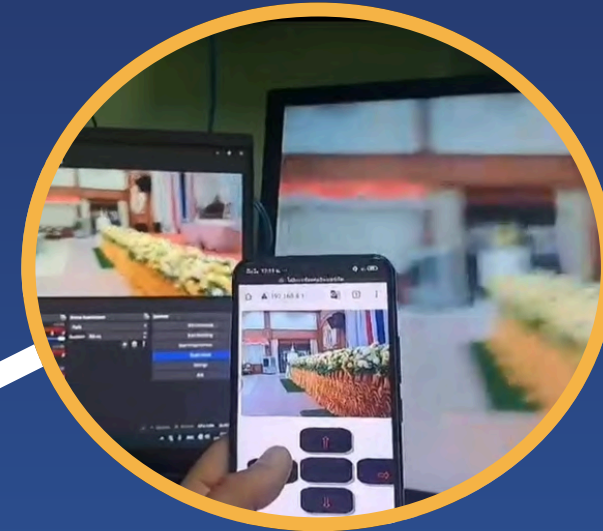
The development of technology



Led to the invention of the portable camera



Which is controlled through a smartphone via an internet connection



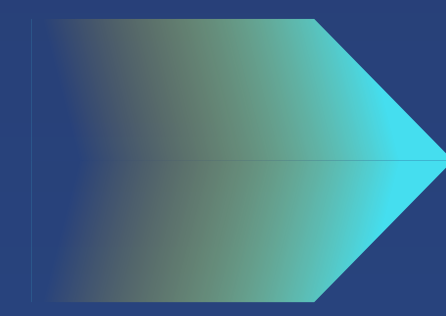
Reduces the need for on-site personnel for monitoring

3. OBJECTIVES

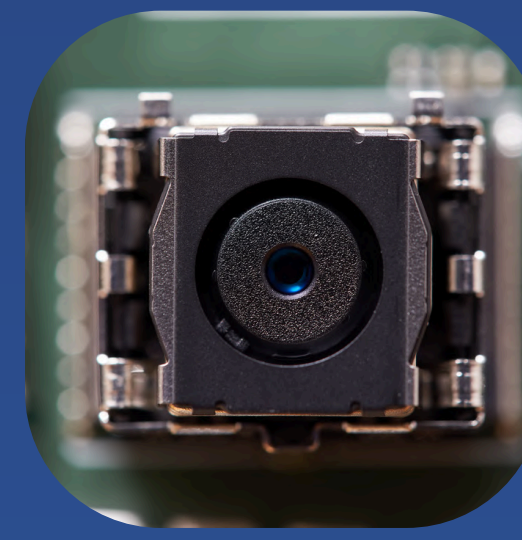
1. To create a camera-moving device using ESP32-CAM, controlled via a server that can connect to the internet.
2. To develop the device to automatically track a person's movement using image processing from the ESP32-CAM.

4. IMPLEMENTATION METHODS

How?



Install the <https://192-168-4-1.com>. on your phone

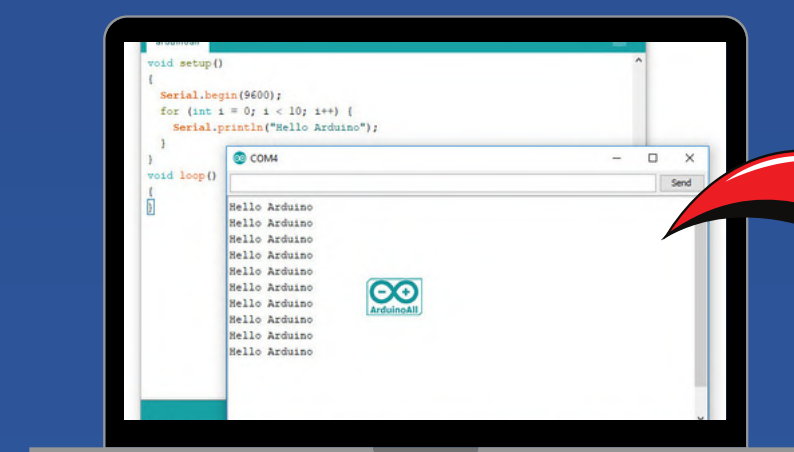


ESP32-CAM

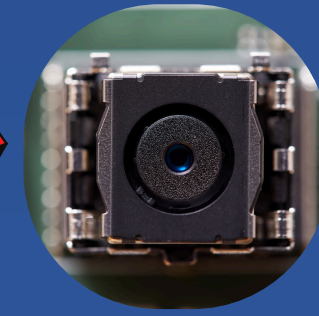


A 12V 80 RPM DC gear motor

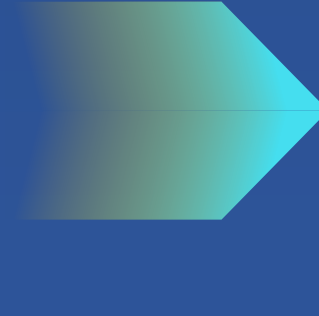
To control the movement of the camera.



Write code for ESP32-CAM



Connect via the internet

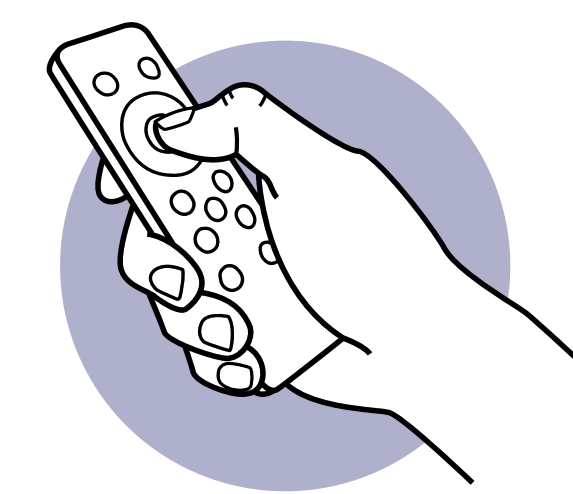


Write code to control movement through the <https://192-168-4-1.com>.

5. BENEFITS



Saves labor and time



Remote control



Flexibility



Space and resource efficiency



Reduced event costs



High precision

6. RESULTS & CONCUSSION

Cam Mover helps save time and labor by eliminating the need for personnel to constantly monitor the camera. The use of a wireless camera mover reduces the necessity for staff to set up and control the camera. Additionally, it allows for precise and quick movement of the camera and changes in viewpoint through remote control via a smartphone using Install the <https://192-168-4-1.com>. on your phone or devices that can connect to the internet.

Cam Mover is also space and resource-efficient, as it does not require control equipment to be installed at the camera location, thus reducing resource usage for event management. It increases flexibility by supporting various camera types, such as DSLRs, webcams, or smartphones, allowing projects to be adapted according to user needs and convenience. This reduces costs associated with hiring staff for camera control, making event organization and live broadcasting more cost-effective.



7. ACKNOWLEDGEMENTS

We would like to express our deepest gratitude to Mr. Sakolkeit Khantong, our advisor, for his guidance, knowledge, and crucial support in the success of our invention and the completion of this project. He provided invaluable assistance and advice, enabling us to carry out the invention and successfully complete this project.

