## Raspberry Pi Security Camera

IDL project for Robby

### **Materials**

- CPU:
  - https://www.amazon.com/Raspberry-Zero-Bluetooth-RPi-2W/dp/B09LH5SBPS (\$30)
  - <a href="https://www.amazon.com/iUniker-Raspberry-Basic-Board-Cooler/dp/B0CQ274LC6">https://www.amazon.com/iUniker-Raspberry-Basic-Board-Cooler/dp/B0CQ274LC6</a> (\$150)
- https://www.amazon.com/Arducam-Raspberry-Camera-IMX519-Module/dp/B0C53BBMLG (\$40)

# Requirements

- Use Python 3
- Needs outlet for power
- Camera has wide angle
- Write Python code that:
  - Looks for changes in the picture
  - When changes are detected:
    - Takes a picture every second
    - Saves that picture to a local computer in the house on the network
    - Stops when no changes are detected

## References

#### **Hardware**

- Arducam for Raspberry Pi Camera 16MP IMX519 Camera Module with 140°(D) Wide Angle M12
   Lens for Raspberry Pi and OpenHD
- Vilros Raspberry Pi Zero 2 W Basic Starter Kit with Muti Purpose ABS Case -Incudes Pi Zero 2 W
   <u>Board, Multi Use Case, Power Supply, HDMI-USB Adapters and More (Black)</u> contains camera
   module adapter

### Software

- Getting Started with Raspberry Pi Zero W and Python 3
- How To Use The Raspberry Pi Camera With Python In 2023
- WiFi Security Camera With a Pi Zero 2W
- Raspberry Pi Zero W and Pi Camera Application
- Build a Raspberry Pi Security Camera Network
- How to build a Raspberry Pi Security Camera A Comprehensive Step-By-Step Guide
- DIY Security Camera: How to Turn Your Raspberry Pi into a Surveillance System
- How to build a Raspberry Pi security camera
- How to Build a Motion-Triggered Raspberry Pi Security Camera
- How to Create a Raspberry Pi Security Camera with Motion Alerts