

# Nakuja Internship

## Week 5 Progress Report

IAN KIBANDI

# Tasks completed last week

- Propellant casting
- Static testing
- Research on Payload camera(ESP32 cam)

# Tasks to complete this week

1. Continue casting propellant and firing tests.
2. Assemble the engine mount.
3. Test out the cameras

# ESP32-CAM

- Poor quality camera
- Cannot stream to multiple devices at once
- Require a server to stream to multiple devices
- Stream is not clear.
- Slow processing speed (160MHz-240MHz)

# Raspberry Pi zero

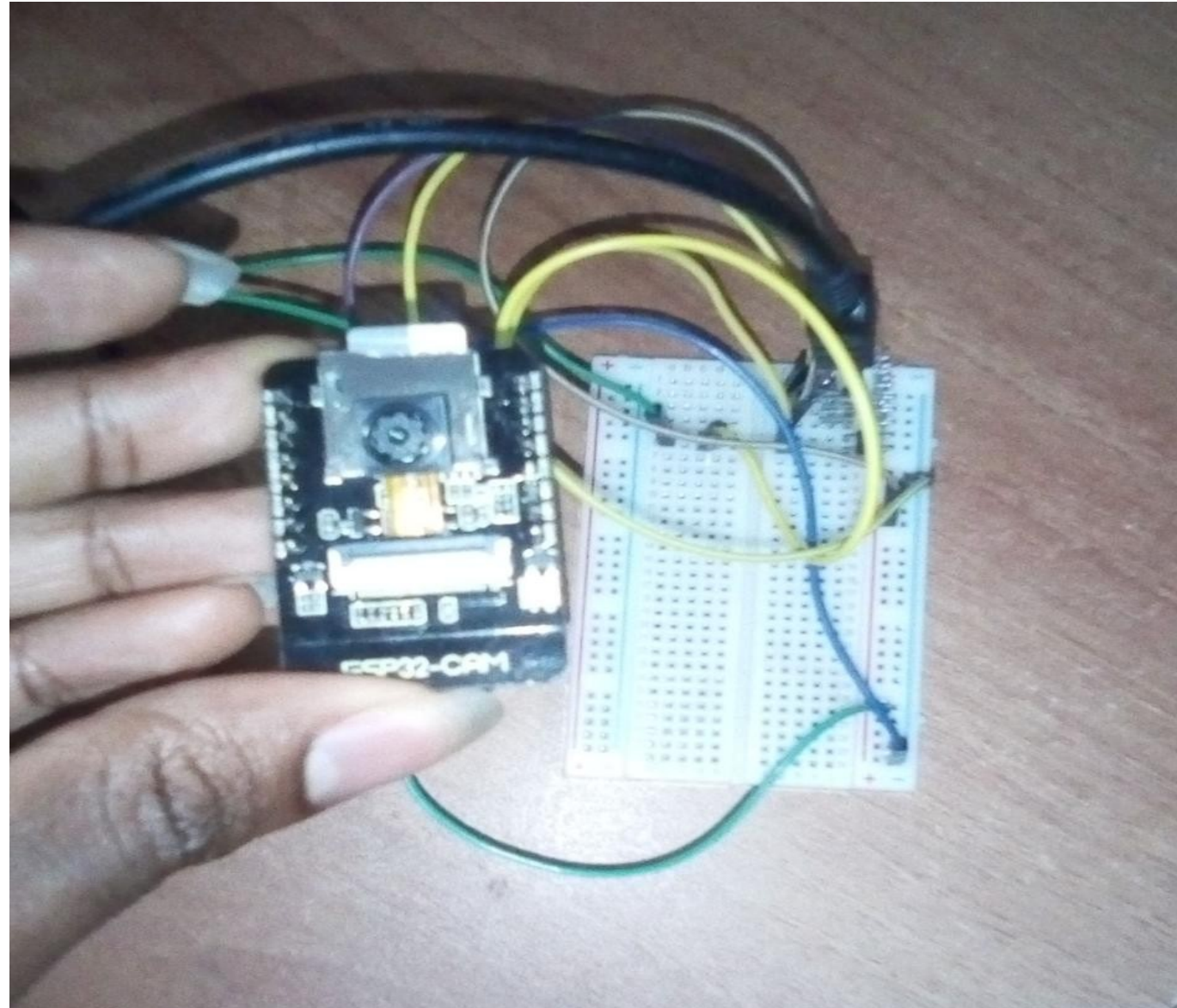
- Considerable size(60mm by 30mm)
- Enough processing power
- Capable of 1080P30FPS
- Easier to code
- Faster(1GHz single core CPU)



# Raspberry PI zero



# ESP32 CAM





# ESP-EYE Development Board V2.1

- Basically an esp32 board with a 2MP camera and a microphone
- Basic facial recognition

# ESP-EYE Development Board



# Timeline

Month	Week	Tasks
March	Week1	Design and fabrication of nozzle
	Week2	Design and fabrication of test stand
	Week3	Casting propellant
	Week4	Testing the model rocket on motor
April	<b>Week1</b>	<b>Avionics bay development</b>
	Week2	Integration and testing with avionics
	Week3	Integration and testin with propulsion
	Week4	Launch of N-1 rocket