

Nakuja Internship

Week 6 Progress Report

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Tasks completed last week

- Propellant casting
- Set up raspberry pi zero W
- Saved video recording to sd Card
- Researched on long range video transmission with pi
- Streaming to youtube
- Researching on geolocation**

Tasks to complete this week

1. Continue casting propellant and firing tests.
2. Work on long range video transmission(compare
3. Continue working on geolocation with raspberry pi

SAVING VIDEO TO SD CARD

- Code on github

Setting up raspberry pi

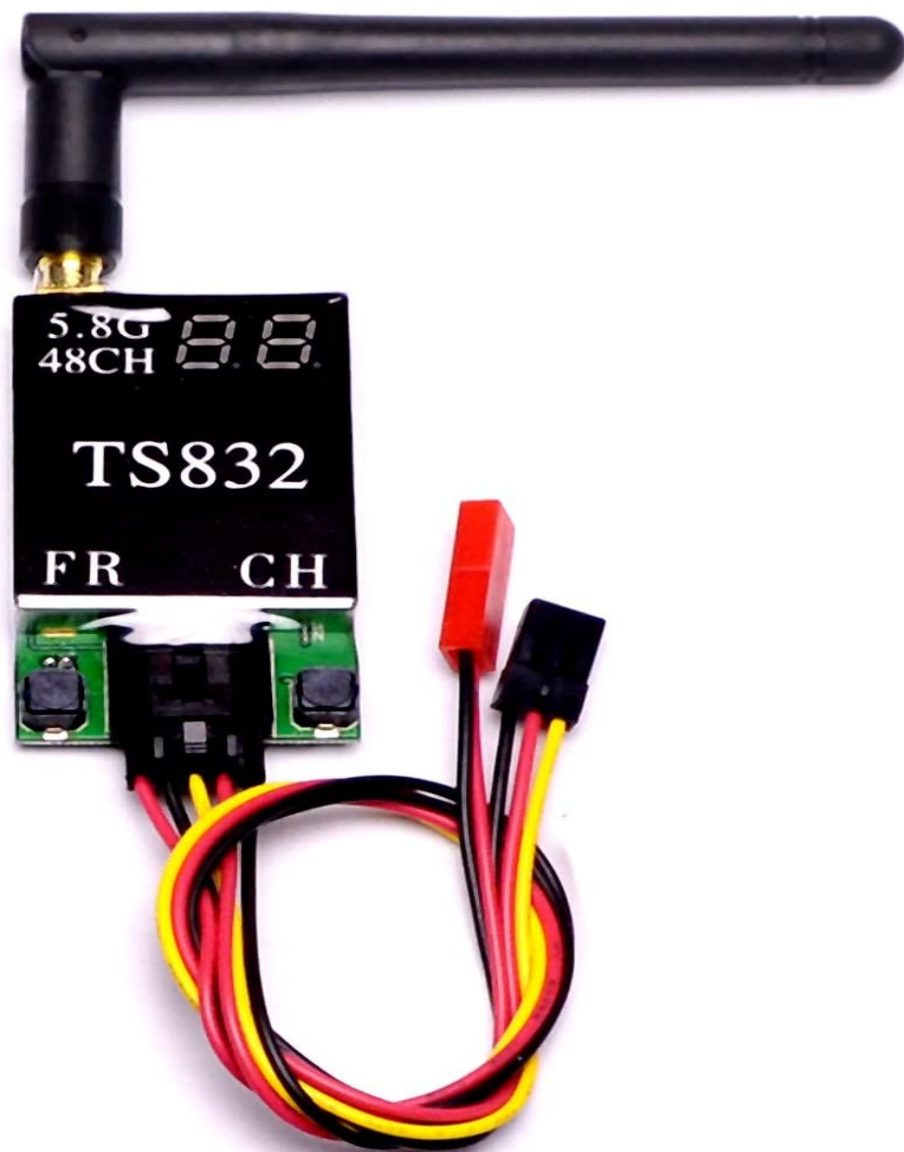
- Raspbian OS
- Access via SSH

Long range video transmission

- OpenHD FPV
- LoRa module
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OpenHD FPV

- “OpenHD uses off-the-shelf Wi-Fi adapters available for purchase online, however it is not standard Wi-Fi, which is unsuitable for low-latency or very long distance transmission. Instead, Open.HD configures the Wi-Fi adapter in a way that is closer to a simple broadcast, much like analog video transmission hardware you may be using already.
- High definition video, 2-way UAV telemetry, audio, and RC control signals can all be sent over a single transmission channel.”(Github)
- <https://github.com/OpenHD/Open.HD#:~:text=Welcome%20to%20OpenHD!,-OpenHD%20uses%20off&text=HD%20configures%20the%20Wi%2DFi,A%20multi%2Dplatform%20Open.>

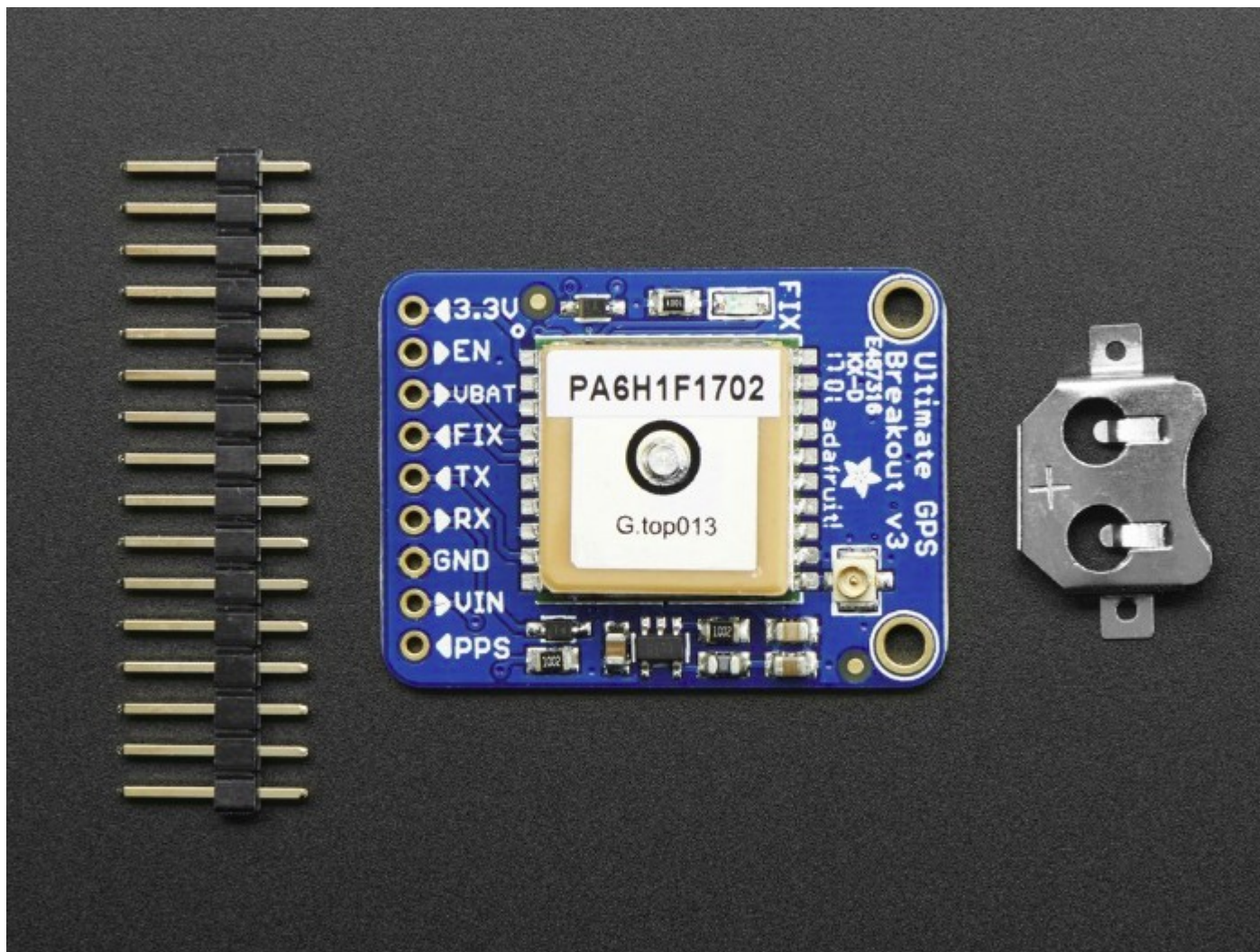


Streaming to youtube

- Was able to stream via commandline(github)

Getting GPS from raspberry pi

- Requires a GPS module for accurate results



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	Week1	Avionics bay development
	Week2	Integration and testing with avionics
	Week3	Integration and testin with propulsion
	Week4	Launch of N-1 rocket