

# AMC SS2024

## Student Projects

### (1) Schafalarm (Sheep Alarm)

Motion detection and tracking of sheep flocks.



Go here: [Schafalarm](#)

#### Students

- Sam (Advisor)
- Tasio
- Marlene

### (2) Chicken Check

Where are the chicken? In the chicken coop? Sitting on the nest? Breeding? Outside?



Go here: [Chicken Check](#)

#### Students

- Taycan (Advisor)
- Sam (Advisor)
- Shreya (Advisor)
- Jihad
- Tarik
- Nour

### (3) Home Assistant Server System

Home Automation setup (on Raspberry PI or the like) with own WiFi router (access point) for an IoT system teaching.



Go here: [Home Assistant Server](#)

## Students

- Taycan (Advisor)
- Ekaterina
- Anastasiia

## (4) Bird Feeder (Pet Feeder)



Go here: [Bird Feeder](#)

## Students

- Shreya (Advisor)
- Sam (Advisor)
- Taycan (Advisor)
- Seif?
- any more?

## (5) Irrigation Cart Nozzle



Go here: [Irrigation Cart Nozzle](#)

## Students

- Amr
- Dillon
- any more?

## (6) Water Quantity Measurement

Building a **groundwater gauge** with low power design, real-time clock and LoRaWAN data transmission.

## Students

- Melchior
- Andreas
- Henrydon

# Further Ideas of Minor Priority

(7) Laser Scanning Drone in Chimneys

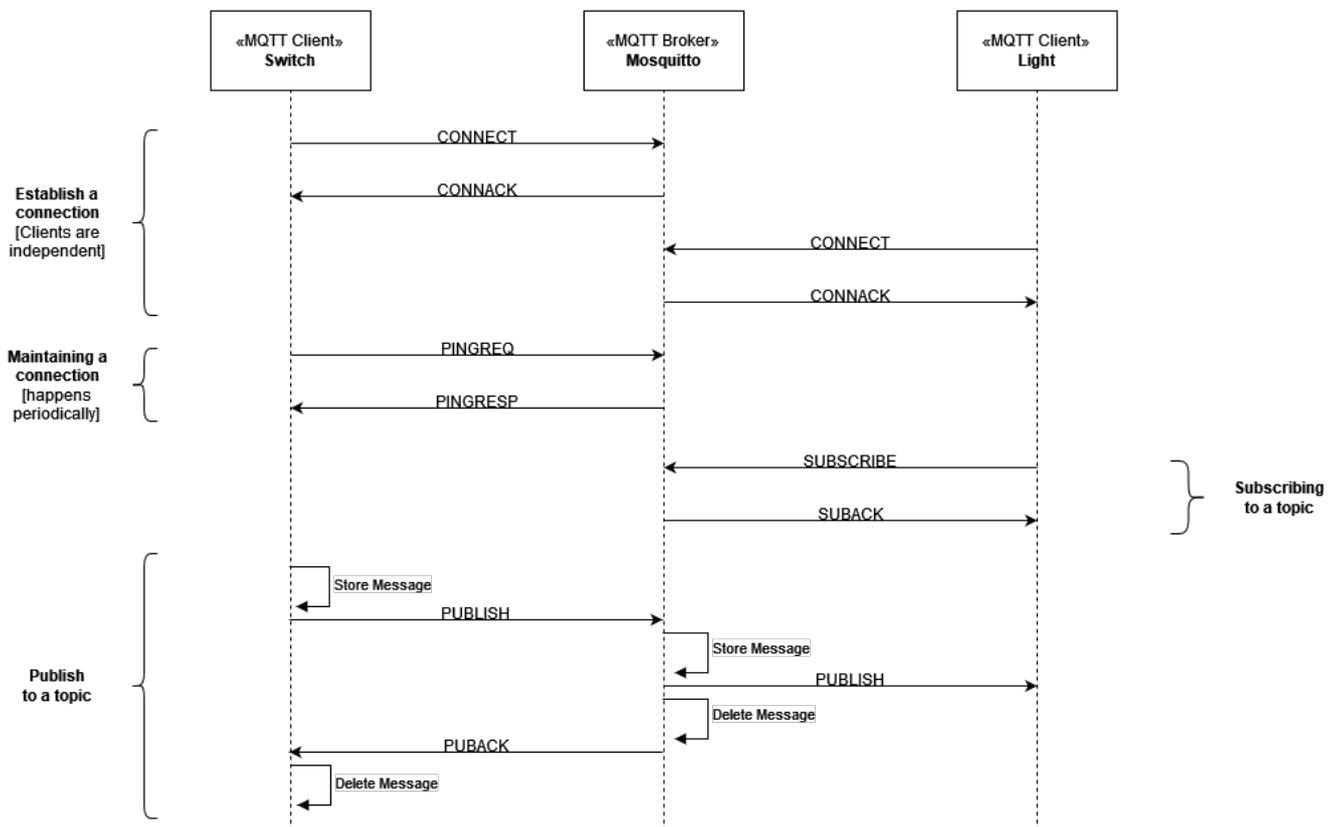
(8) Green House Window Opener Integration

## Stuff to be sorted

### MQTT Publish-Subscribe Sequence

Template

MQTT Full Sequence Example [QOS 1]



### Reseller

- <https://www.amazon.de/dp/B09YXJKBFV>

From:

<https://student-wiki.eolab.de/> - **HSRW EOLab Students Wiki**

Permanent link:

<https://student-wiki.eolab.de/doku.php?id=amc:ss2024:start&rev=1717098987>

Last update: **2024/05/30 21:56**

