AMC SS2024

Student Projects

(1) Schafalarm (Sheep Alarm)

Motion detection and tracking of sheep flocks.

⚠️ **Go here: Schafalarm**

Students

- Sam (Advisor)
- Tasio
- any more?

(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)
- Jihad
- Tarik
- any more?

(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
- any more?

(4) Bird Feeder (Pet Feeder)

⚠️ **Go here: Bird Feeder**

Students

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

(5) Irrigation Cart Nozzle

⚠️ **Go here: Irrigantion Cart Nozzle**

Students

- Amr?

Further Ideas of Minor Priority

Laser Scanning Drone in Chimneys

Water Quantity Measurement

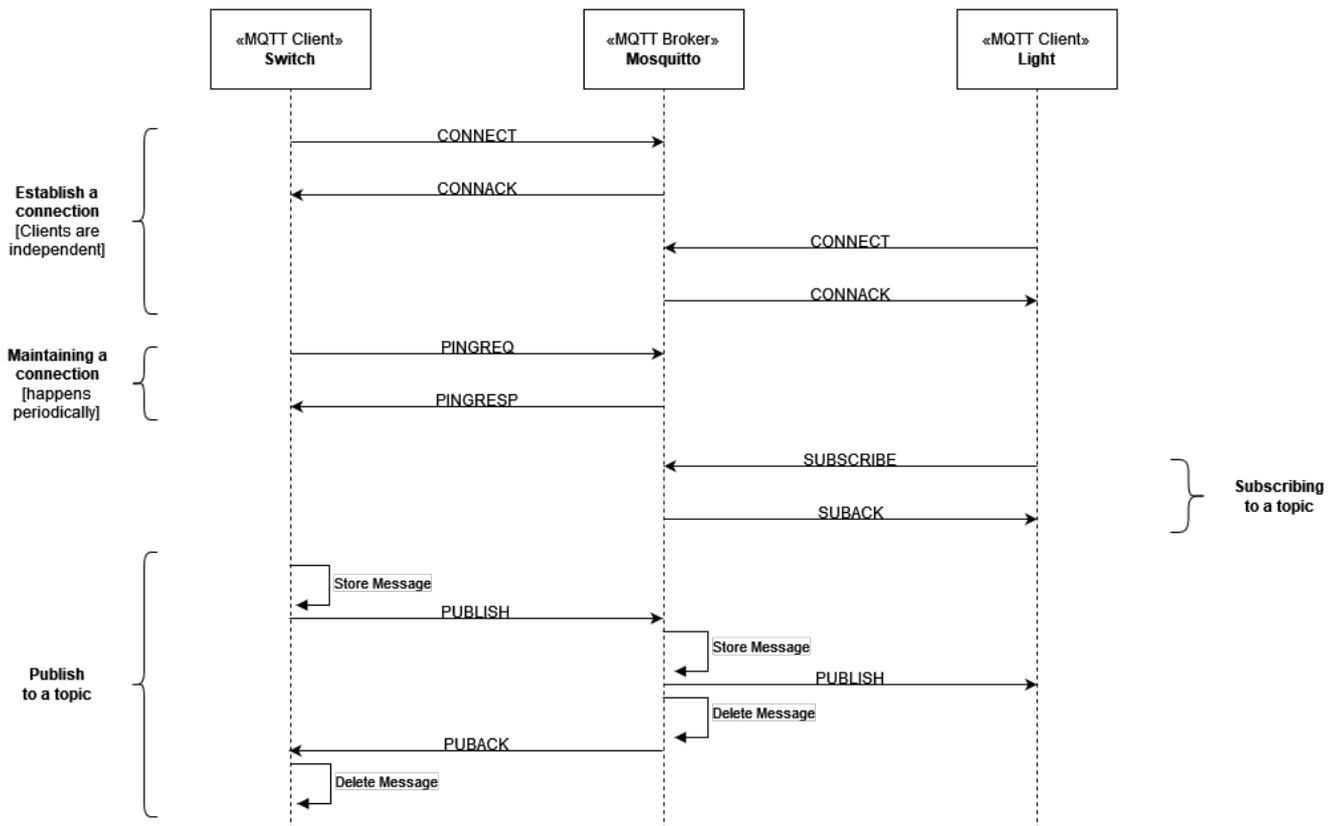Building a **groundwater gauge** with low power design, real-time clock and LoRaWAN data transmission.

Green House Window Opener Integration

Stuff to be sorted

MQTT Publish-Subscribe Sequence

Template

Reseller

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