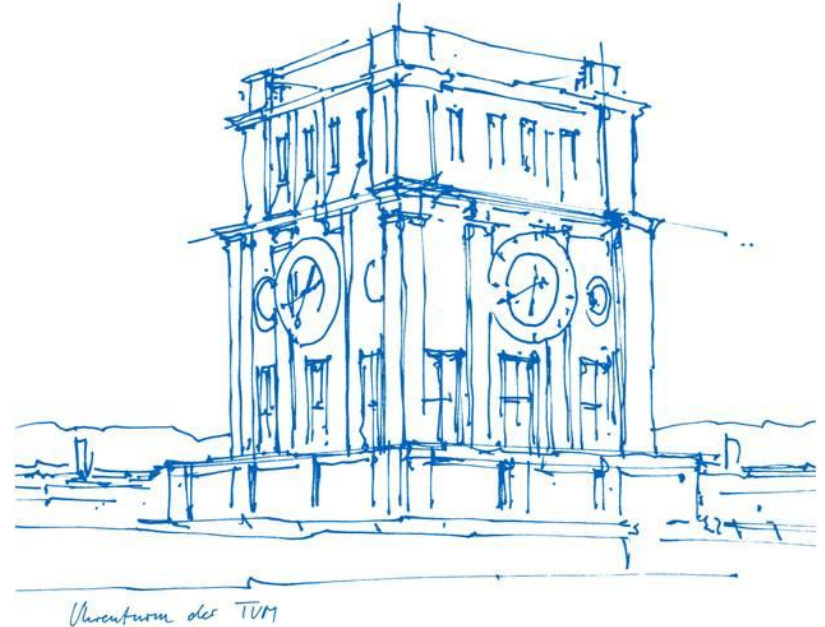


Mobile Solar Panels

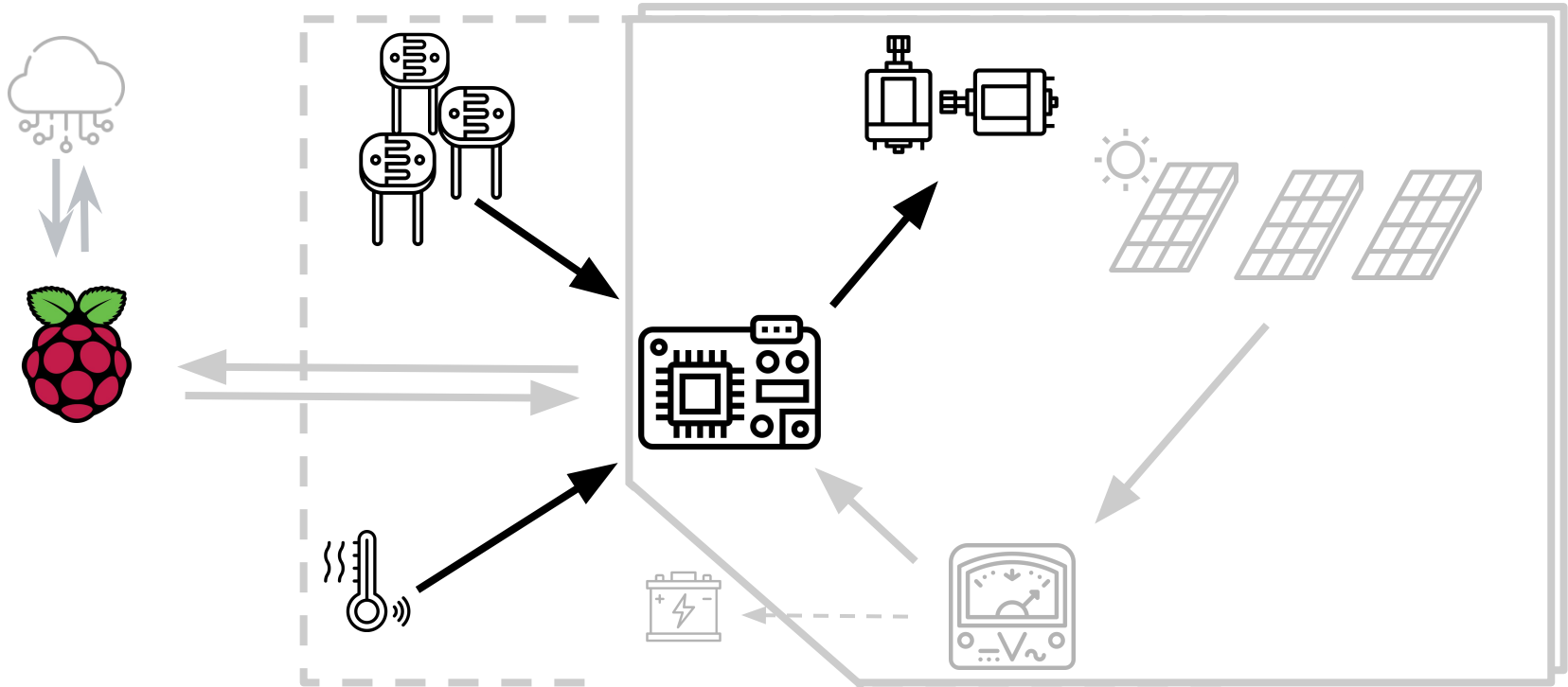
Sprint 2

Eric Armbruster, Florian Freund, Sebastian Klinke

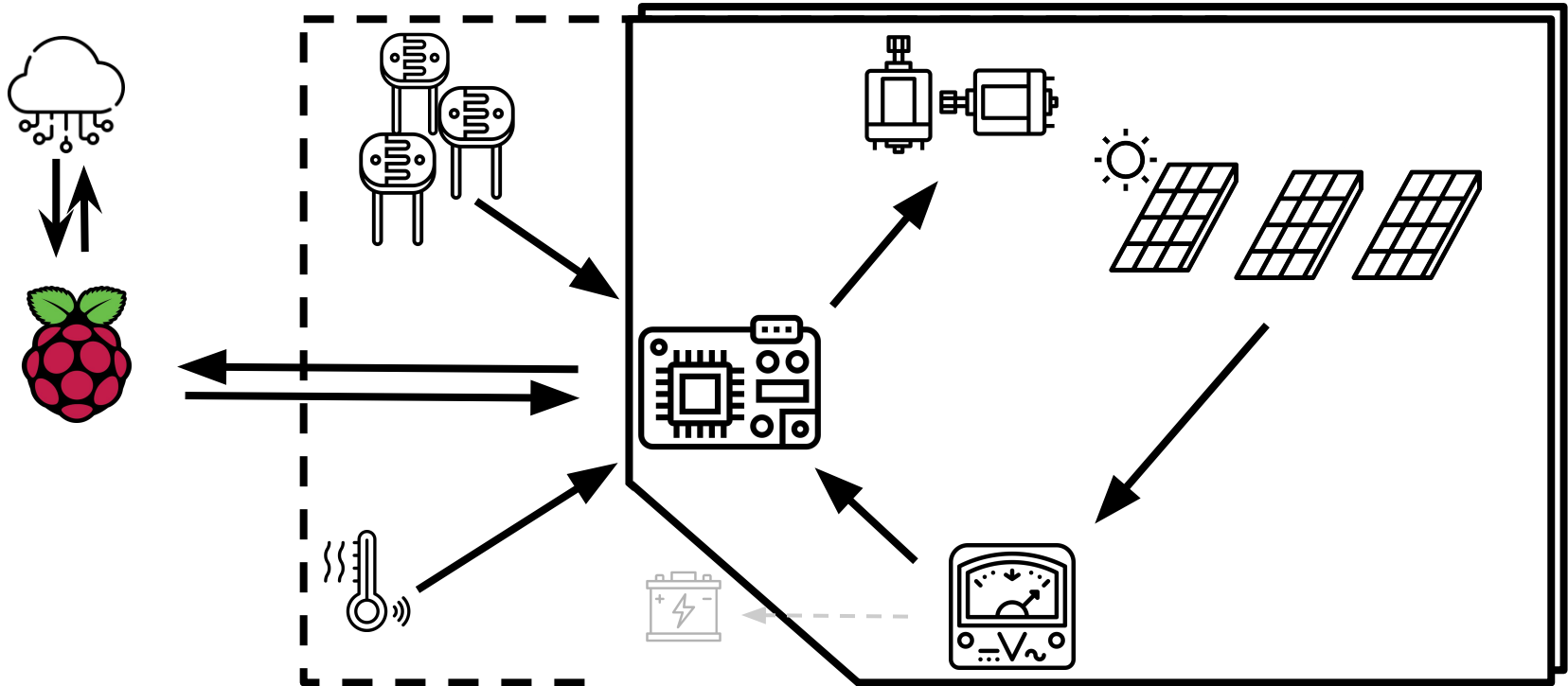
Garching, 17.06.2022



Last Sprint



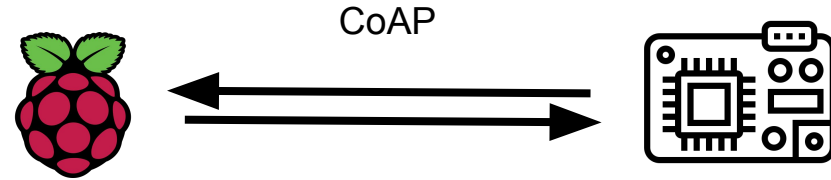
This Sprint



Hardware

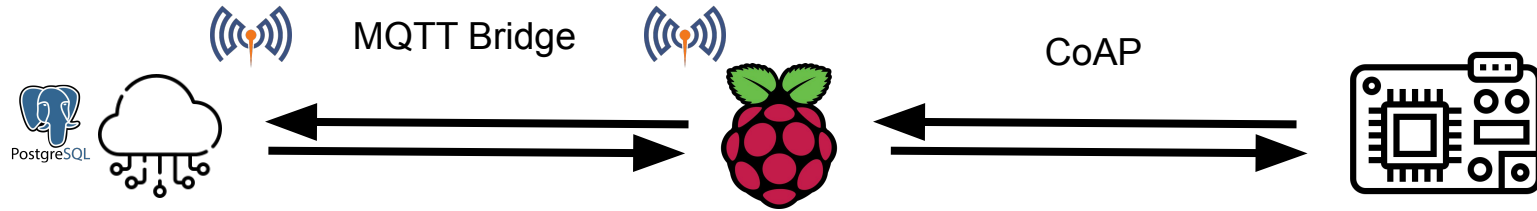
- Connect all missing sensors
- Contribute to / Fork 3rd party libraries
 - Required for I²C daisy chain support
- Calibrate measurements

CoAP



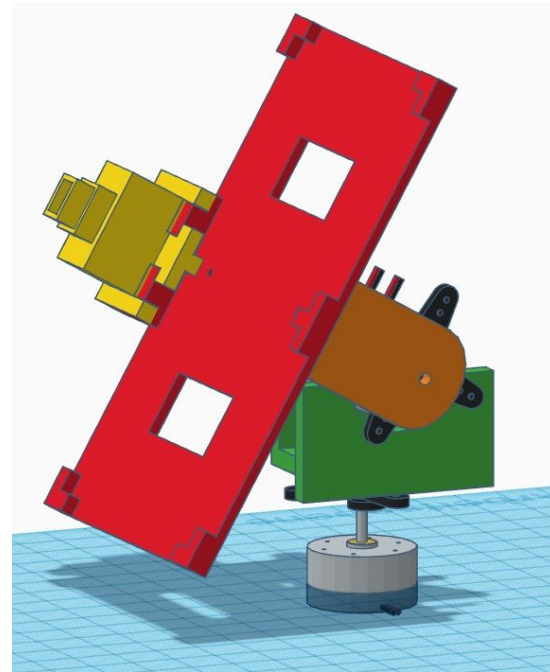
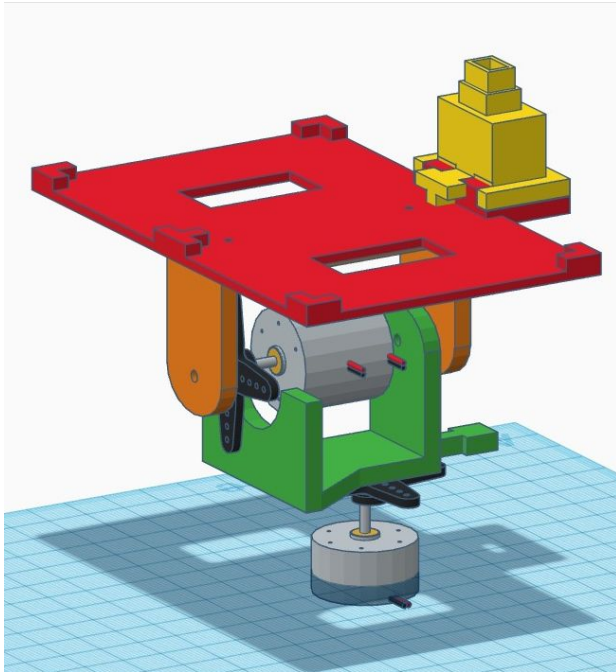
- On ESP: coap-lite Rust crate
- On Raspberry: aiocoap

MQTT

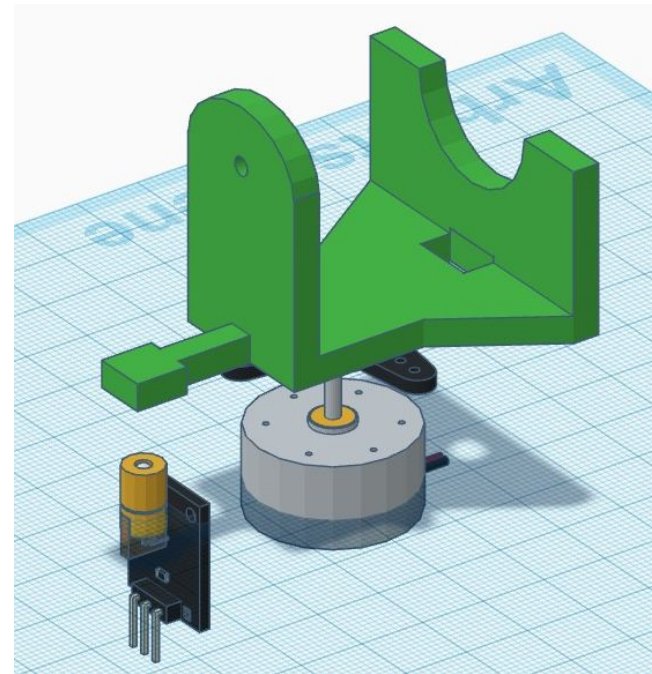
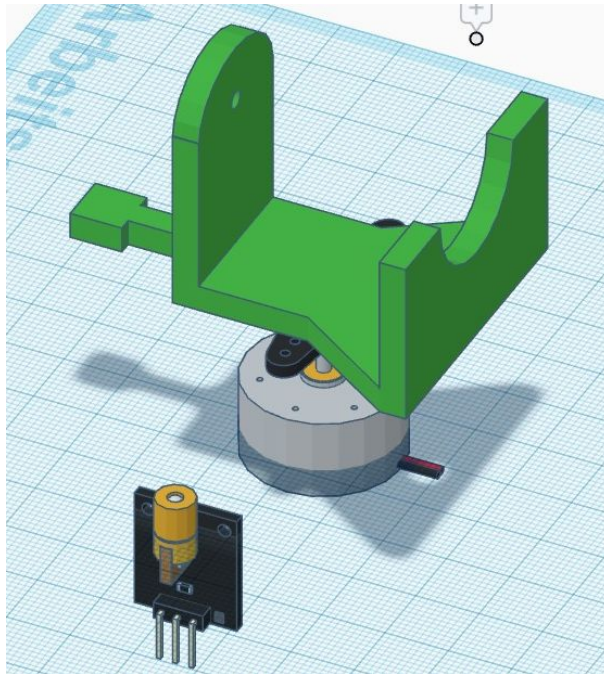


- Mosquitto as MQTT broker
- Containerized the cloud and edge applications

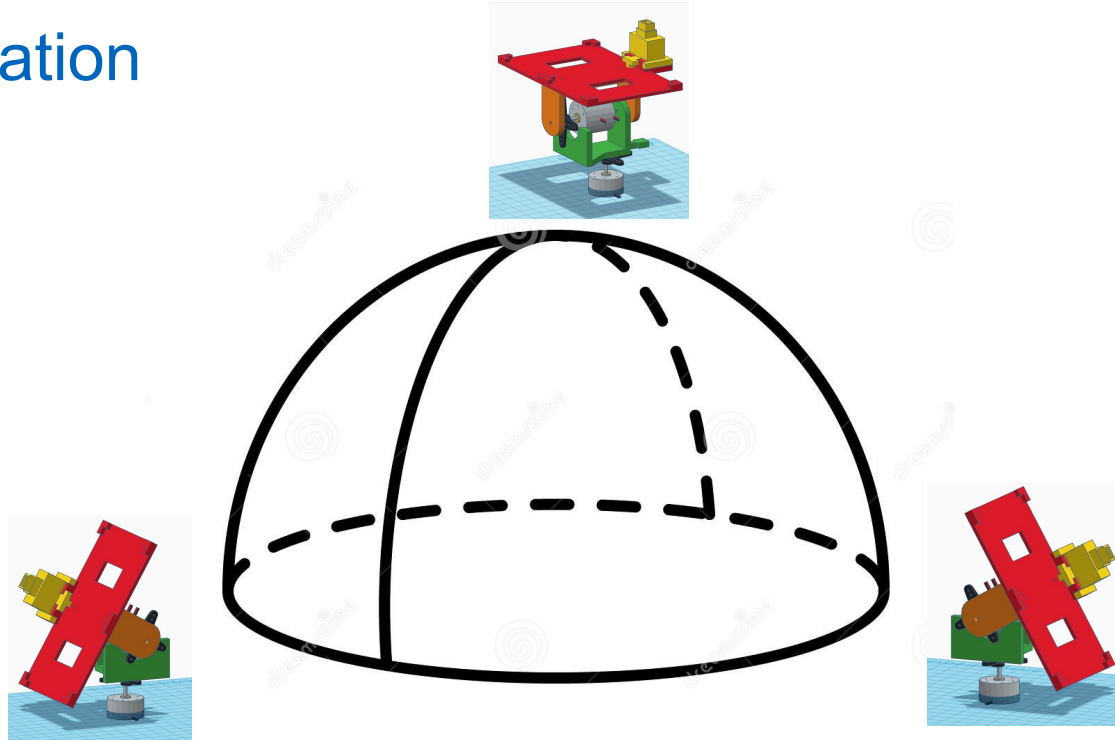
Prototype



Motor Angle Initialization

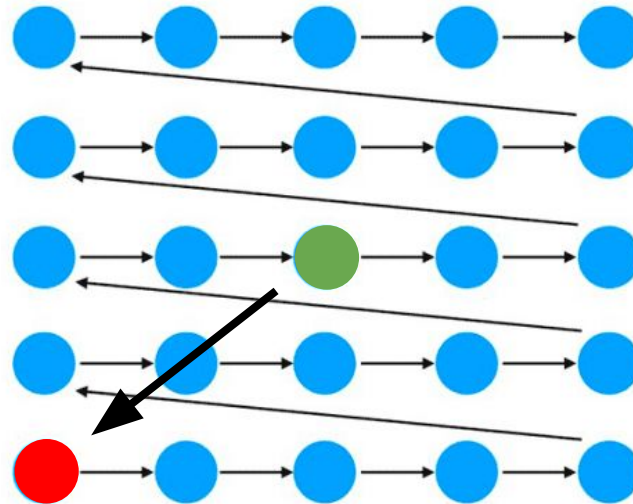


Initial Orientation



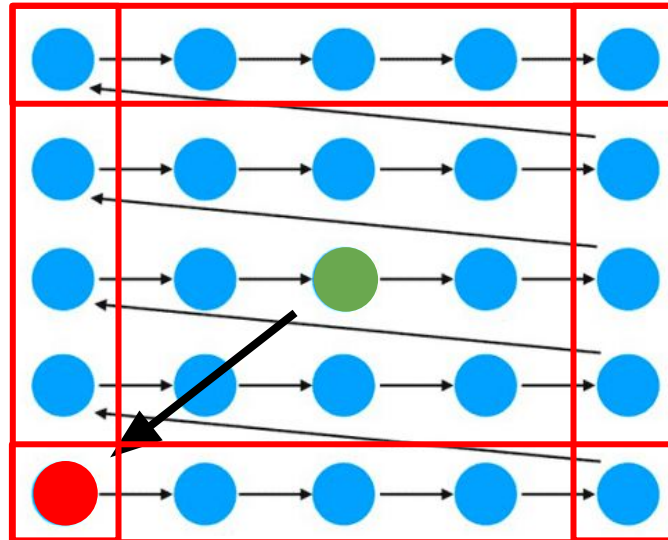
Grid Search

Initial Position



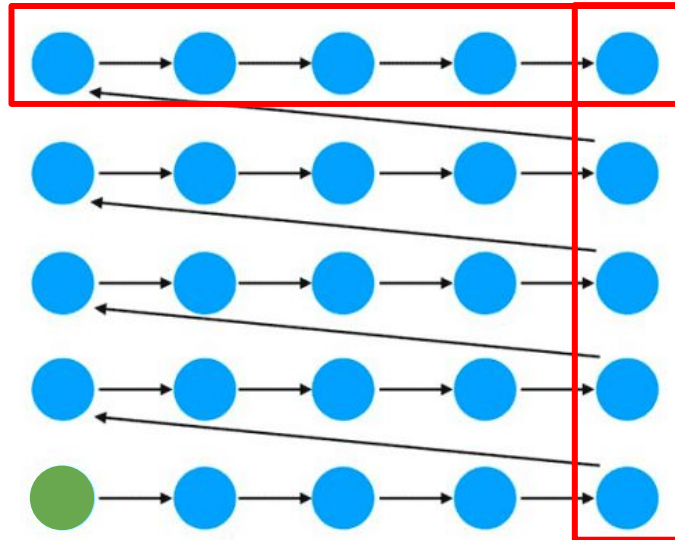
Grid Search

Initial Position

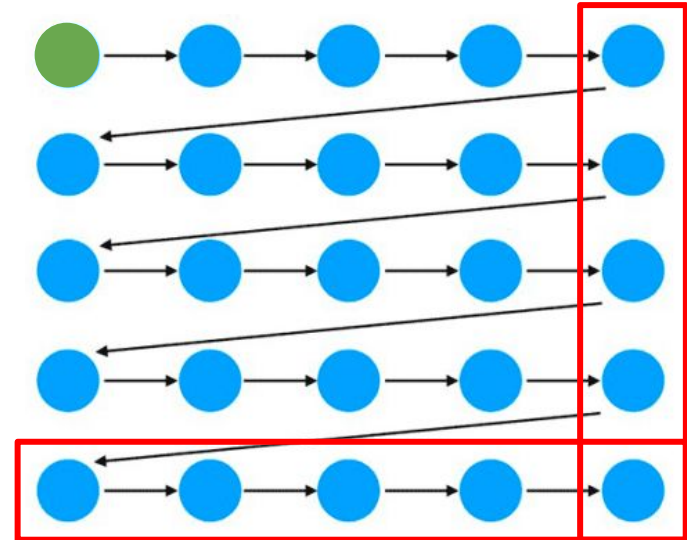


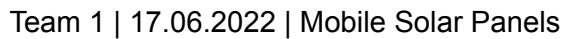
Grid Search

Sunrise to Zenith



Zenith to Sunset





Next Sprint

- Until demo finish visual components:
 - Finalize the prototype (3D print)
 - Calibrate motion parameters for sun tracking algorithm
 - Cloud: Visualize data in Grafana
- Get started with anomaly detection