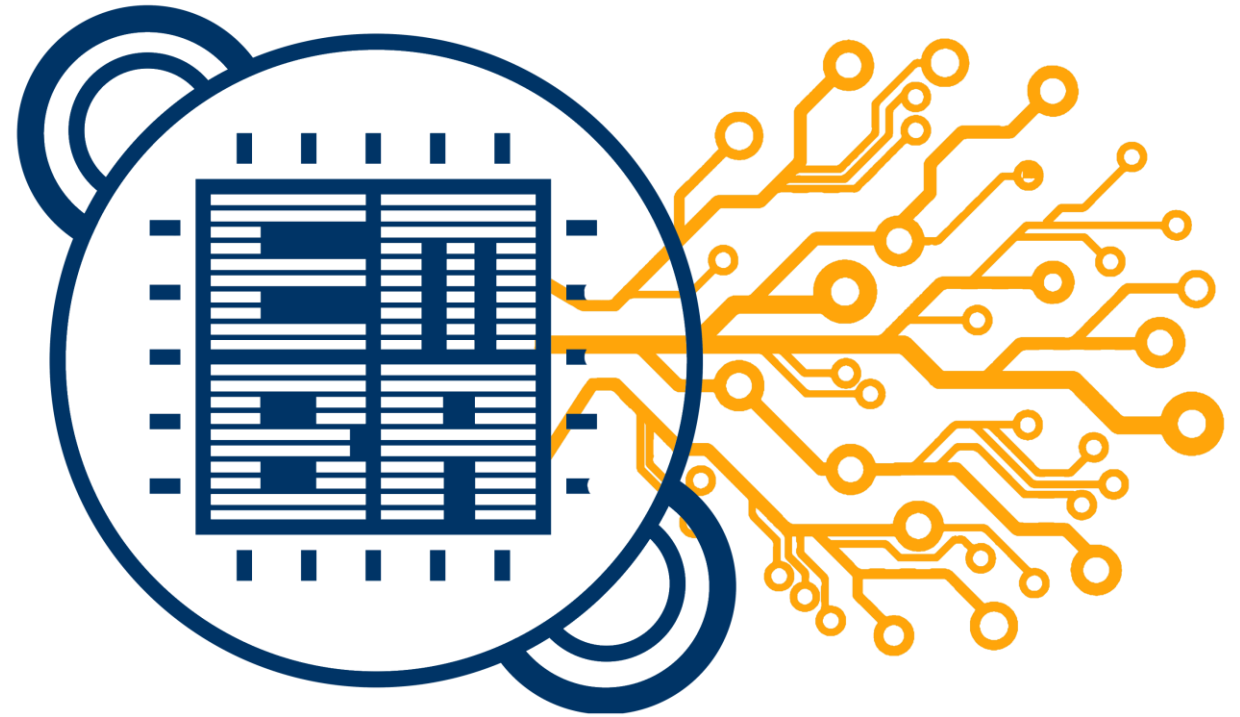# EMBARK

A containerized service for
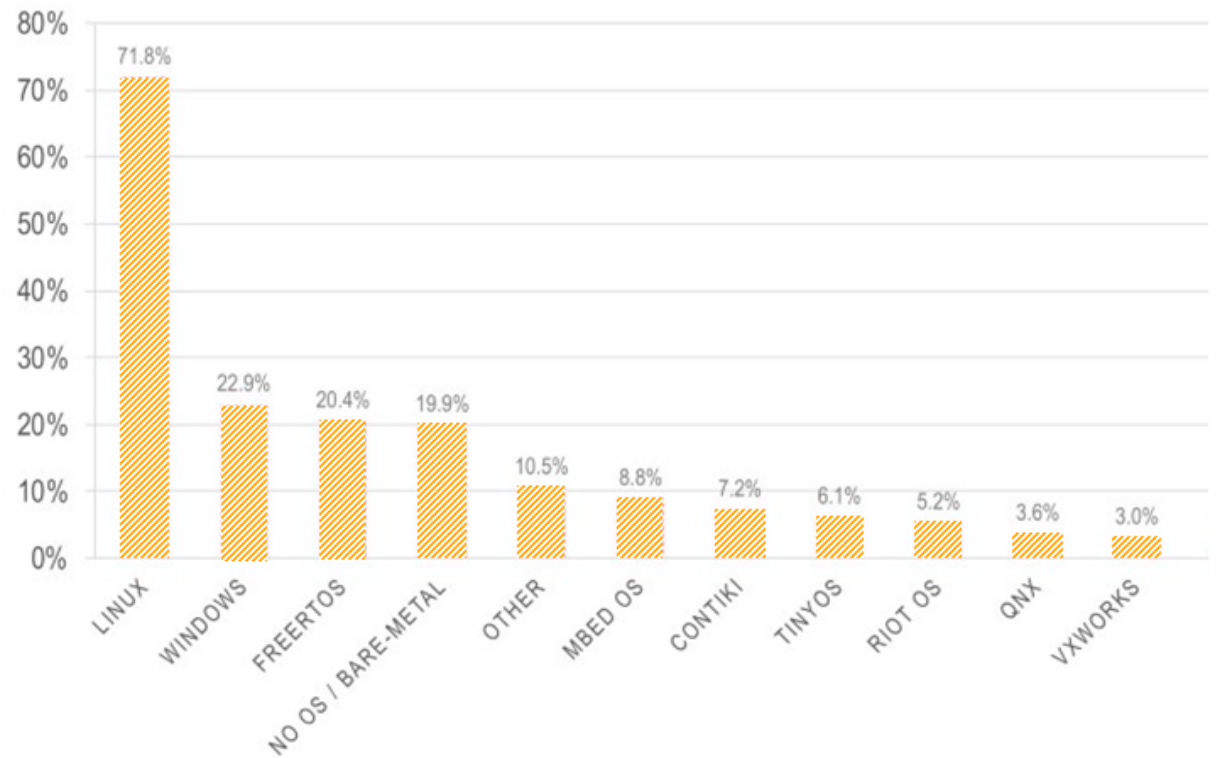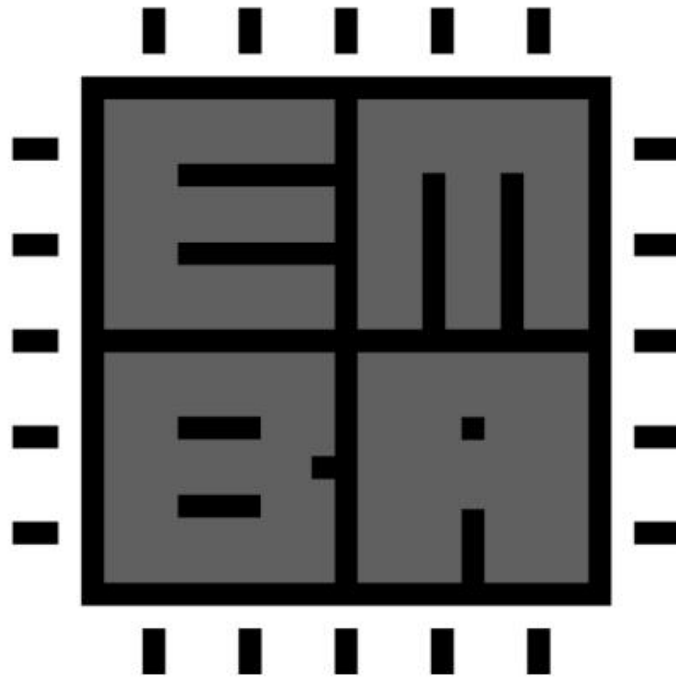analyzing embedded firmware

ISSUE

- (IoT) devices –
  with full operating system

- 30 billion IoT devices in
  private/commercial settings
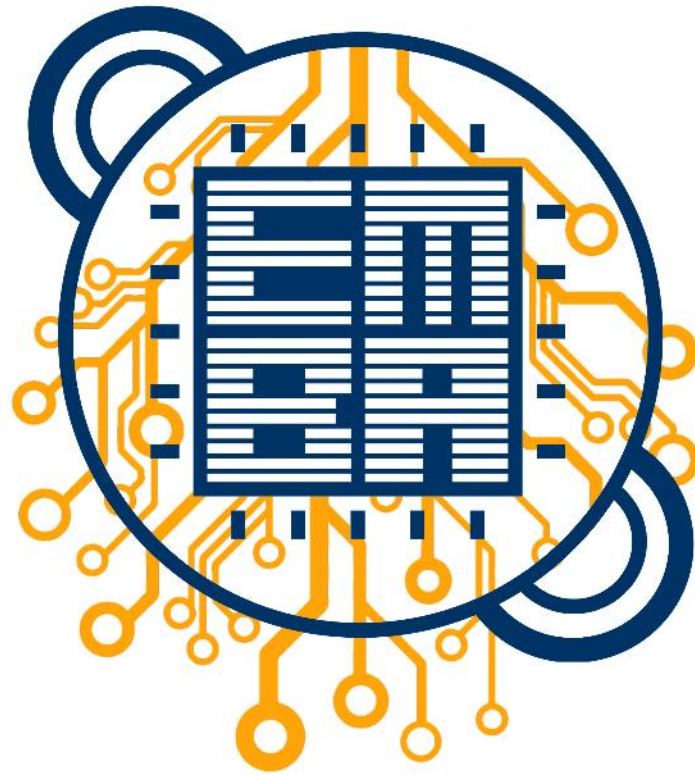
- new security vulnerability

IoT Operating Systems

Which operating system(s) do you use for your IoT devices?

EMBA – A commandline tool for analyzing embedded Linux firmware

EMBARK – A web based service for analyzing and reporting embedded Linux firmware

Vision

EMBA as containerized service

- Containerized in docker

- basic management API

- API to upload an image and receive a report

Multi-User Web UI

- EMBA as web service application

- A UI supporting multiple User actions at once

- Uploads are managed and reports are stored and remain available

Managment Dashboard

- Managers can get overview processes and reports

- User role system to manage access

The Functionalities

Multi-user upload

Multiple analysis running at once

Track current running emba processes

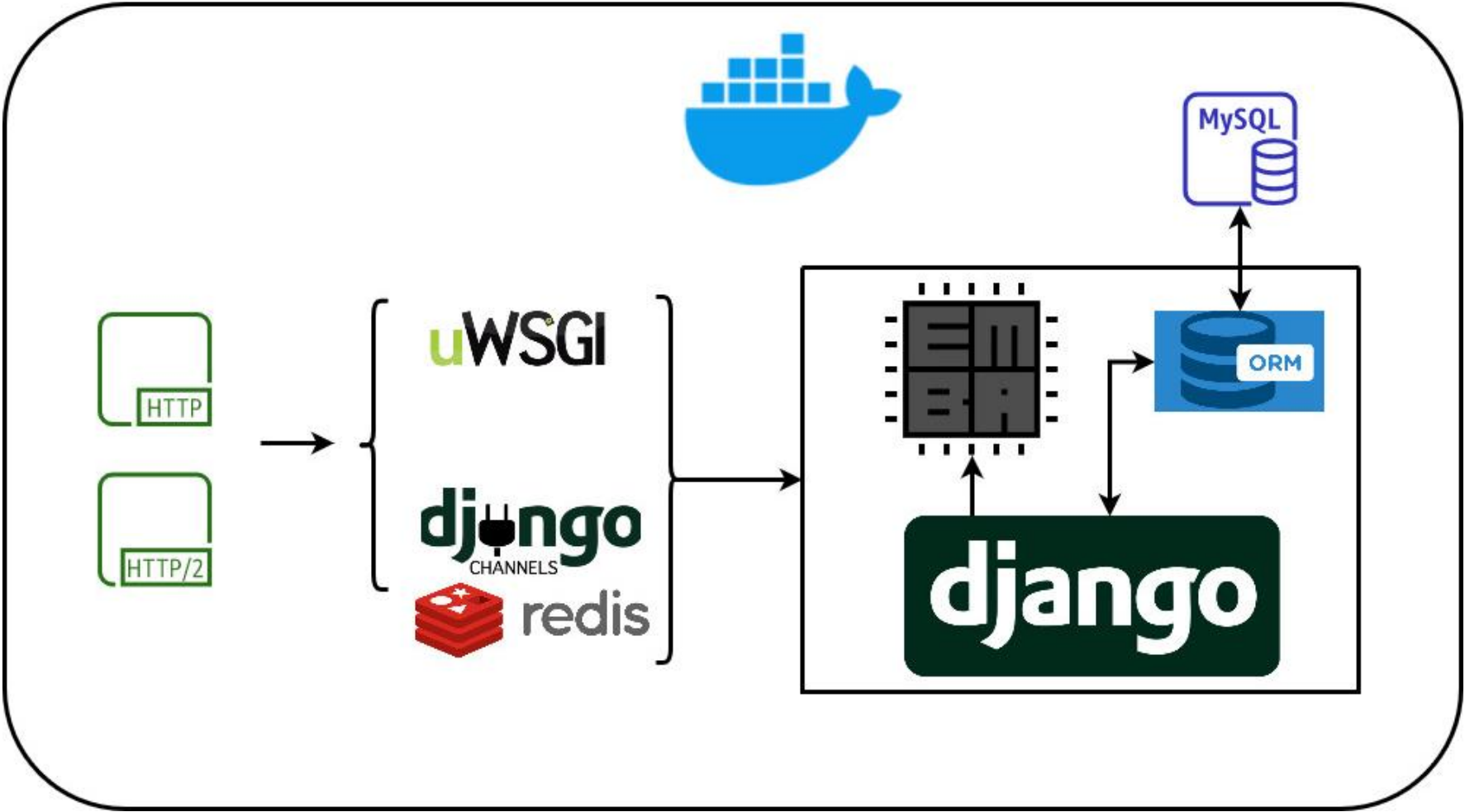Aggregating data in multiple Dashboards

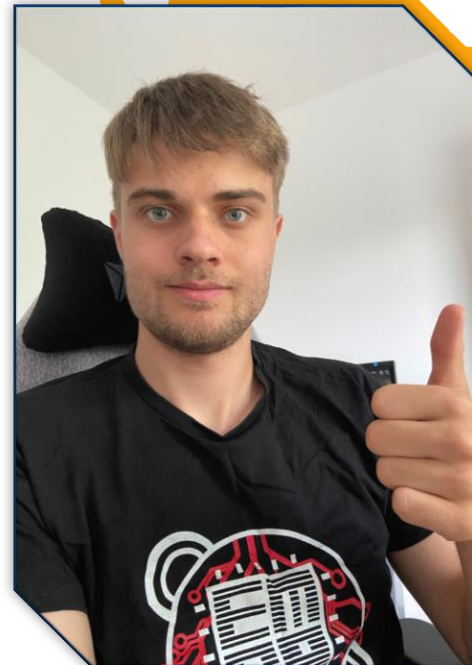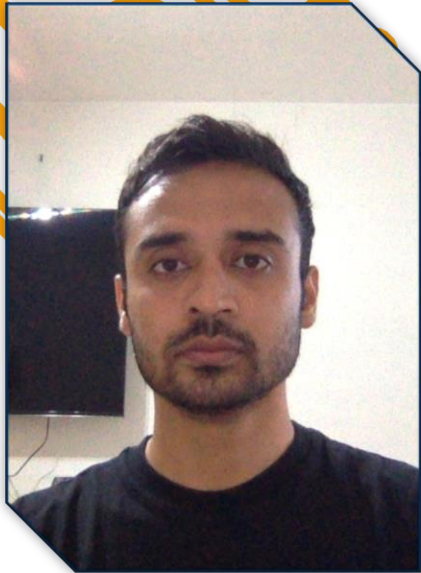Download reports for further analysis

Architecture

THE AMOS PROJECT: EMBA

HANDS ON

References

- https://p4cx.medium.com/emba-b370ce503602
- https://www.link11.com/de/blog/it-sicherheit/internet-of-things-iot-definition-beispiele/