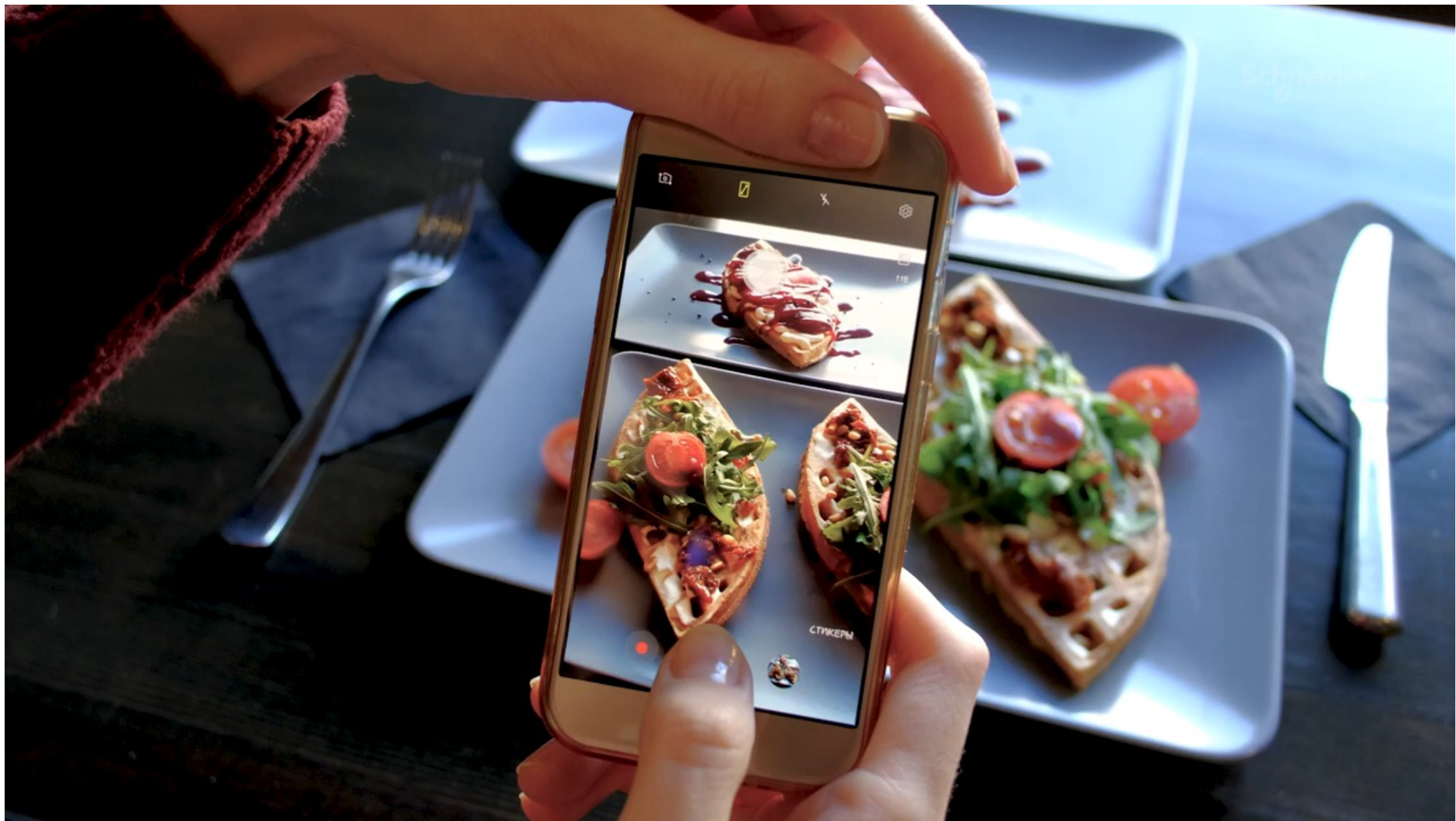




Very short intro to Schneider Electric

Jörgen Malmberg



Schneider Electric

- **Revenues: €29Bn (2021)**
- **Worlds most Sustainable company**
- **Presence in 100+ countries**
- **150.000+ employees**

- **Digital Buildings R&D**
 - 200 people
 - 100+ in Lund
 - **Creating products for more "intelligent buildings"**
 - **Cloud, apps and analytics**
 - **Supervisory tools**
 - **Field Devices**

System Integration Lab

10-15 agile development teams creating SW features & HW and delivering them to the System Integration Team

There we have a System Integration Lab that corresponds to a building area of a large city block

We collect huge amounts of data

- Temperature, CO2, humidity, alarms, events ...

We need to sort out what is interesting in all this

- Crashes, restarts, cpu peaks ...

What can AI do for us?



Master Thesis Project

Master Thesis project in AI & Data-driven Operations

AI and machine learning are rapidly becoming crucial tools in handling complex systems and managing large sets of data. During the System Integration tests huge amounts of data are gathered from our control systems. The challenge for us is to review all that data and sort out and identify the critical parts for further analysis. We believe that there are some very sound use cases where we could apply AI/Machine Learning. Initially we will focus on anomalies in utilization of system resources like memory and CPU and will correlate this data with extensive time stamped event logging that are also available. We will setup a data processing pipeline to train and classify test data.

This Master Thesis project is done in collaboration with Ericsson Research. Schneider Electric will provide data sets and use cases, Ericsson will provide compute and cloud resources, and Lund University will supervise on AI techniques.