

## CAISR Intelligent Environment

### Supporting research and education

February 2014

The CAISR Intelligent Environment is platform for **demonstrating** and **showcasing** CAISR research; **implementing** and **testing** new technologies in a realistic environment; supporting **data collection** and **validation** of research hypotheses; as well as providing a functional infrastructure for **student projects**.



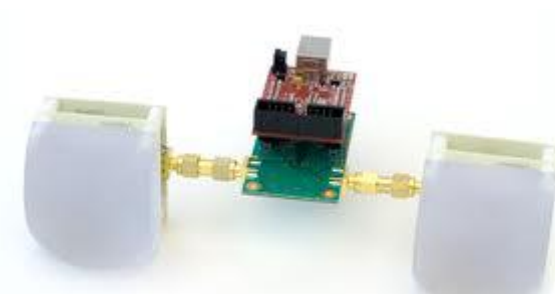
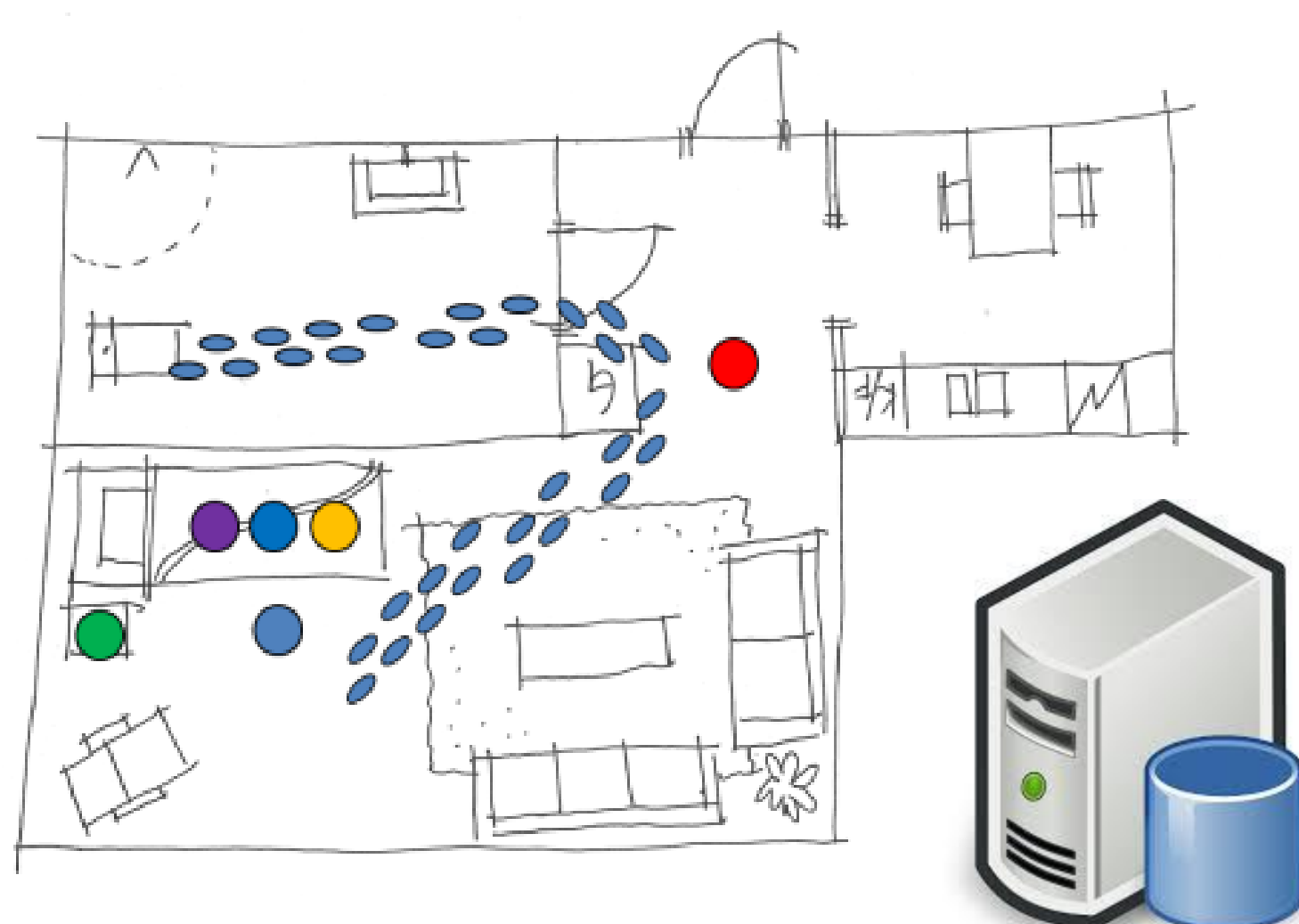
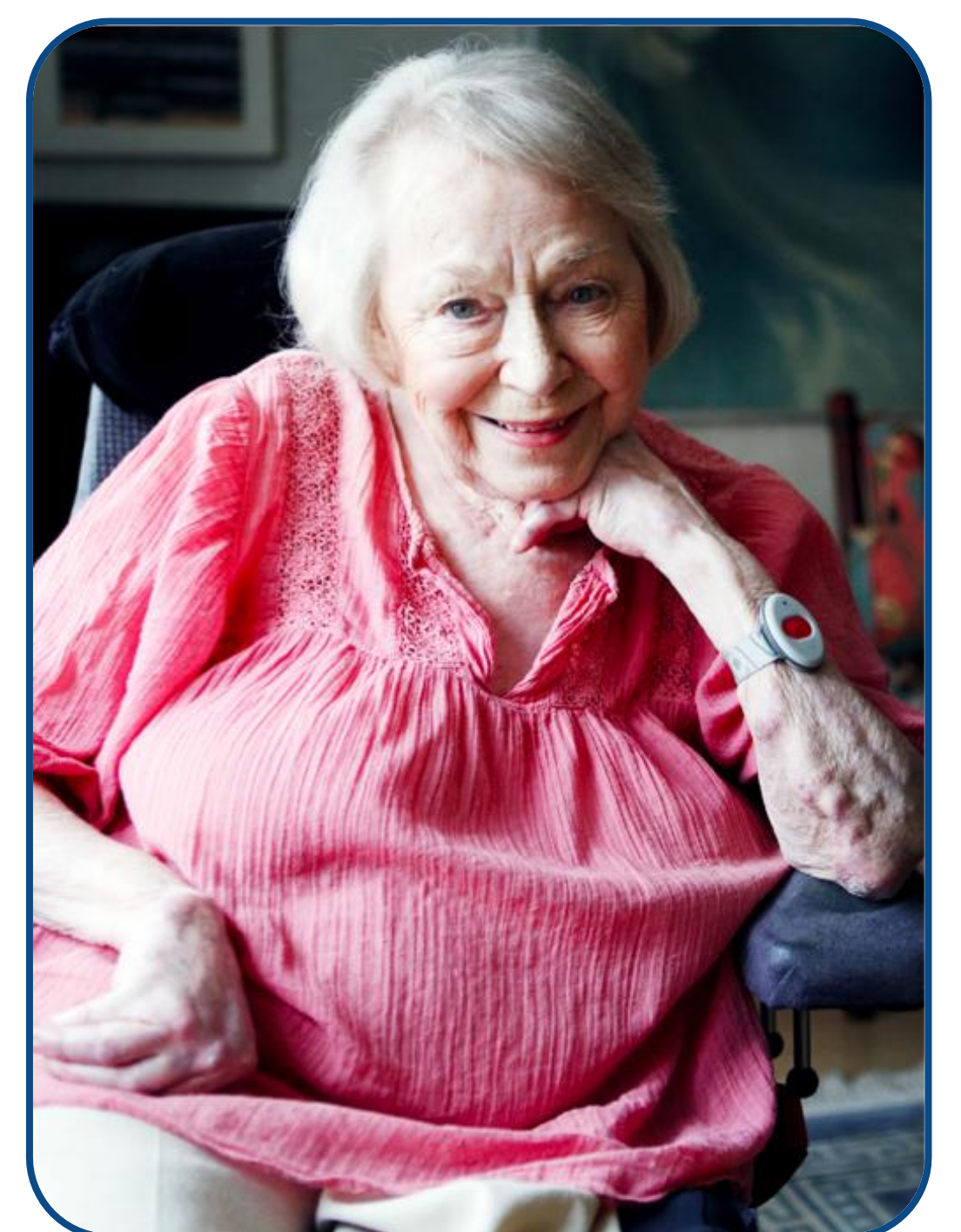
The intelligent environment acquires diverse information about a person's activities and health, using a number of distributed **fixed and mobile sensors**. This data can be analyzed with the help of **aware intelligent systems** in order to understand a situation and its context, assess the person's health and wellbeing, support decision-making, detect sudden or slow deviations, provide appropriate services in emergency situations.

#### Research projects:

- Situation Awareness for Ambient Assisted Living – Jens Lundström
- A Database-Centric Architecture for Home-Based Health Monitoring – Wagner O. de Moraes
- Impulse Radar in Health Applications – Magnus Hållander

#### Student projects:

- Mobile Social Robots in an intelligent home – Matthias Mayer (BSc)
- Tracking more than one person in a smart environment using fixed sensors and a mobile social robot – Jianyuan Ma & Yinan Qiu (MSc)
- First response to emergency situation in a smart environment using a mobile social robot – Gloria Lazzaro (MSc)



Hälsoteknikcentrum Halland



HALMSTAD  
UNIVERSITY