

# Fine-granular Sensing of Power Consumption

A new sensing modality for an accurate detection, prediction, and forecasting of higher-level contextual information in smart environments



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

## Goal

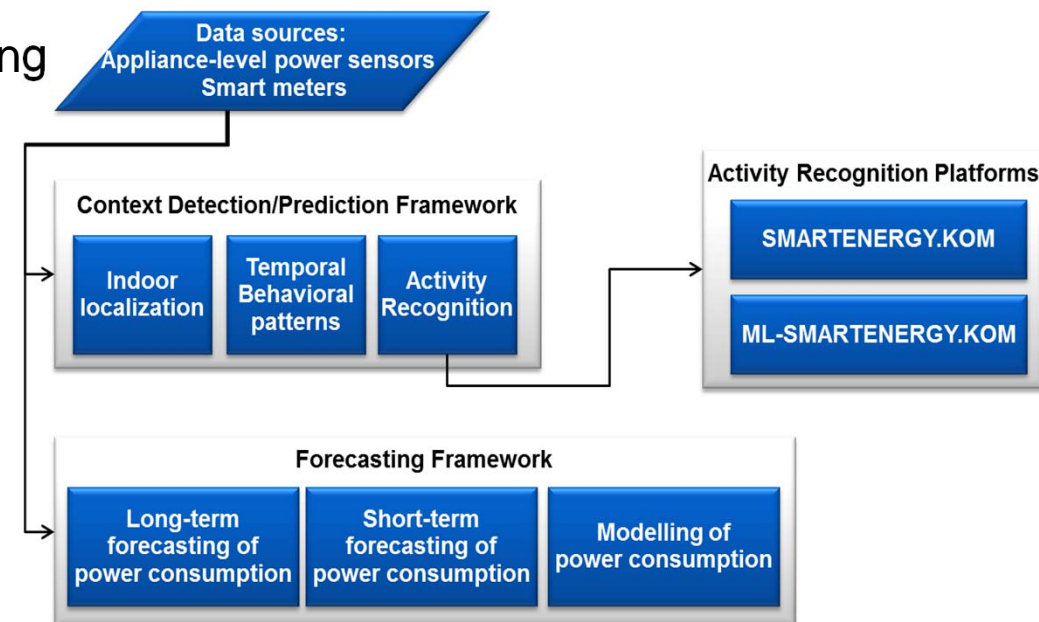
Detection, prediction, and forecasting of contextual information from fine-granular power consumption data

## Challenges

- Noisy and limited datasets
- Noisy ground truth
- Complicated models

## Approach

- Activity recognition with the means of machine learning algorithms
- Detection of temporal behavior patterns in the everyday life of the users in smart home
- Time series analysis of daily power consumption



Alaa Alhamoud