Research Story : Ph.D. Forum

# Motivation

* Enable scalable and quality-aware data management for complex sensor-based applications with the Living Lab as the main environment (as an example for large scale multi-sensory environment with redundancy- Other examples: smart factory or smart home).

# Problem definition

* The lack of understandable and practical models to express common and obvious sensor data quality dimensions and constraints
* The lack of modelling tools and support for the integration into data stream processing environment
* How to compute quality dimension for data such as accuracy, timeliness, coverage (check for term existence), consistency (check also) and completeness
* How to react to changes in the data quality after the first quality model in created

# Related field

* Data quality, quality of context, data integration and cleansing
* Data Stream Management
* Quality aware data stream processing
* Sensor data management and platform

# Related work

* Who else tried to solve this or similar problems?
* Why do they not (completely) solve the problem class?

# Approach

* The idea / method: how do we want to solve the problem class?

# Evaluation

* What will we do to answer the research question? (Experiments, Measurements, …?)
* Which features of the approach will be evaluated?
* Can we compare it with the related work? (“It’s 10% better”)
* Which results do we expect?

# Project plan

* When will who do what to achieve the results?

# Publication plan

* Where could we publish such results?
* What are the deadlines?
* Who could help as co-authors?