REFLECT

Responsive Flexible Collaborating Ambient (2008 – 2010)

The REFLECT project aims at sensing cognitive, emotional and physical expressions of users and reacting to them by adapting his environment. These adaptations have the ultimate goal of helping the user to manage his cognitive, emotional and physical state: e.g. relaxing when necessary, or keeping the user in a state of flow during work. For this, a component-based framework is used leveraging knowledge present in a central ontology for dynamically changing the systems configuration and thereby adapting the software itself.

In comparison to ASCENS, the REFLECT project focuses heavily on single-user scenarios (e.g. car-driver interactions in the automotive domain or desk work environments) and on the human-computer interface. While the first focus is too narrow for ASCENS, the second focus of REFLECT is too specific to take into account. Nevertheless, we will build on the software engineering knowledge gathered in the REFLECT project and contribute it to ASCENS.

REFLECT website

FRONTS

Foundations of Adaptive Networked Societies of Tiny Artefacts (2008 – 2011)

The PERADA project FRONTS aims at developing models and mechanisms for the adaptive organization of tiny artefacts. Unlike ASCENS, FRONTS is mostly focused on devices dynamic interoperability, rather than on general software engineering issues.

FRONTS website