Get a competitive advantage with engineering of embedded software applications

EASE Research on Software Application Development

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EASE - The Industrial Excellence Centre for Embedded Applications Software Engineering - aims to be a world class applied software research facility for embedded software applications. The objective is to ensure that industrial partners have a competitive advantage with respect to competency and innovation of novel solutions and effective engineering of embedded software applications with physical and logical mobility.

The centre impacts on the innovation system through provisioning of competency, via a continuous exchange loop between industry and academia, involving research challenges, industry personnel, researchers, students and research results. These range from technical solutions that can be used in products to improved work procedures for the development.

The research is divided into four themes, which take industry relevant problems as its basis, develop and evaluate long term solutions.

**PARALLEL PROCESSORS PROVIDE POWER, BUT REQUIRE NEW WAYS OF PROGRAMMING.**

**Flexible Execution of Software in Parallel Embedded Systems**

- to identify and introduce enough parallelism in the applications in order to utilize the performance potential of multi-core processors.
SOFTWARE PRODUCTS ARE BUILT “INSIDE-OUT” NOT TAKING THE USERS INTO ACCOUNT.

**User Experience-Driven System Configuration**

– to develop methods, models and support, and to evaluate how the user experience affects and can drive technical and engineering decisions in software development

MORE AND BETTER PRODUCTS MUST BE DEVELOPED WITH LESS EFFORT.

**Efficient Software Development**

– how to handle quality attributes and how to choose which development approach, such as traditional or agile development, that should be used in different situations.

EFFORT IS WASTED ON REWORK SINCE PRODUCT INFORMATION IS NOT ALIGNED.

**Aligning Requirements and Verification**

– researching new approaches that enable a more efficient and effective management of the alignment between requirements and test for embedded software applications.

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Industry partners are encouraged to join the center in order to get full access to its results and to influence its research direction.
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EASE is a collaboration between:

Sony Ericsson
Axis
Ericsson
Vinnova

SOFTHOUSE
ABB
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EASE takes part in the Mobile Heights cluster

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