2011K-timing

T-106.5840 Seminar on embedded systems L (3-10cr)

Topic Spring 2011: Timing Analysis for Real-Time Processing (3cr)

Arrangements

Basics

- basic arrangement can be found on the slides of the 1st session (to be inserted on this wiki)

Crafting

- we will use this wiki
- we will add subpages during the autumn for various phases and tasks of the seminar

Literature

- we will use Mendeley

Seminar information

For informing the seminar participants, we will use both this wiki and e-mail as our channels.

Basic information of the course can be found in Noppa:

- T-106.5840 Noppa page

Note that the seminar is with a varying topic.

Seminar findings

The seminar will be mostly based on a survey

- Wilhelm et. al. *The worst-case execution-time problem---overview of methods and survey of tools*. ACM Transactions on Embedded Computing Systems (TECS), Volume 7, Issue 3, April 2008. doi: 10.1145/1347375.1347389.

TBD

Seminar meetings and results

The seminar will meet on Thursdays 2pm, room A232 in Aalto CSE building.

- Week 14 (2011/04/07):
  - Session 1/intro (Vesa)
- Week 15 (2011/04/14):
  - Session 2/Flow and value analysis (Stefan)
- Week 17 (2011/04/28):
  - Session 3/HW modeling and static methods (Sami, Timo)
- Week 18 (2011/05/05):
  - Measurement-based methods (Kalle)
  - RT analysis for control SW (radio)/Embedded system design techniques (Antti)
- Week 19 (2011/05/12):
  - Session 5/RT analysis for DSP applications and Challenges of analysis (Tommi, Niklas)

NOTE that the deadline for the final papers is at the end of period IV.

Seminar format

Will we have paper-based seminar

- based on schedule of presentations

How to pass the seminar

- presentation given and paper accepted

Prerequisites

Check the Noppa information on formal prerequisites. Basically, programming skills and knowledge on software systems. But also, you should have some interest on RT systems, etc.