Presentation: Magnus Persson

- Working as a PhD student in embedded systems at KTH Machine design, Stockholm
- Born outside Halmstad, west coast/southern Sweden
- Worked in industrial automation for a year before university
- Studied for my masters (automation & mechatronics) mainly at Chalmers (Gothenburg) and TU Hamburg-Harburg
- Supervisors at KTH: Martin Törngren and DeJiu Chen
- Research interests
  - Model-based *
  - Components and component models
  - Architecture exploration in distrubuted embedded systems
  - Development tool integration
- Projects:
  - **DySCAS**, FRAMES, SAINT3, **CESAR**, iFest, Mode architecture

Recent contributions

- CESAR
  - Participation in the meta-model working group, working towards providing a common CESAR meta-model (CMM)
    - Modular but largely an ad-hoc approach
  - Participation in component model working group
  - Work on architecture exploration for distributed embedded systems
    - Towards formalization of the architecture exploration problem
    - Methodology suggestion
- DySCAS
  - Dynamic self-configuration in small-scale automotive embedded systems through a middleware solution

Suggested topics

- Multi-view, multi-criteria architecture exploration for distributed embedded systems
  - including automotive, safety-critical and/or real-time
  - Both methodology issues and representation issues
- "Sound" modularization of meta-models and component models
  - With the main purpose of promoting reusability of information between models of the same (actual) system/component built in different formalisms and/or tools.
  - Ultimately avoiding model inconsistency between them

- Success criterion: Larger degree of understanding
  - Or at the very least: just as much or even more confusion, but at a higher level
  - Hence indirectly: papers