



# Software Architecture in Practice

*Introduction to the course*



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# Teachers



# Klaus Marius Hansen



## Associate Professor

- Dept. of computer science / University of Aarhus
- Interests: Software architecture, system development, pervasive computing
- Manager, ISIS Katrinebjerg Software
- Scientific manager of infrastructure group of the Danish national network for “pervasive communication”, <http://www.komialt.dk>
- SA@Work project

## Industrial experience

- Developer, director of research & development, Ideogramic ApS, building innovative diagramming solutions
- Area manager, Software/Object Technology, Alexandra Institute
- Collaboration with Danish companies: Maersk Line, Danfoss, Grundfos, Systematic Software Engineering, TDC, and others



# Henrik Bærbak Christensen



## Associated Professor

- Dept. of computer science / University of Aarhus
- Interests: Software architecture, teaching
- Leader of part-time education in SW engineering
- SA@Work project

## Industrial experience

- Architect *and* developer for a product suite of meteorological systems for Danish airports.
- Collaborations with Danish companies: Danfoss, Systematic Software Engineering, and others.



# Goal of the course

## Terminology

- to support *communication*

## Techniques

- to support *practical work*
- *not* in the buzzword sense:
  - “To solve all problems, switch to product X”
    - X = .ASP, .NET, C#, MDA, UML, XML, EJB, ...
- in the *mental tool* sense
  - patterns, conceptual frameworks, technology independent designs

## Perspective

- Some topics only exemplified or outlined...



# Goal of the course

## Concrete outcomes

- Definition of architecture
- Architecture description / documentation
- Characterizing quality of architecture
- Techniques for achieving architecture quality



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# Course Website

<http://www.daimi.au.dk/SAiP>



# Template for seminars

## Presentations

- outlining some topics

## Work in groups

- analysis, reading, application, discussion

## Wrap-up

- common understanding...





**"If you think good architecture is expensive,  
try bad architecture."**

Brian Foote and Joseph Yoder