Abstract

The discipline of systems architecting must be developed in the wider context of existing disciplines and related research work. The body of knowledge to be developed consists of a frame of reference, systems architecting methods and case descriptions.

The education of architects must be developed concurrently with the know how. Know how gets value via skilled people.
The context of architecting

natural system architect habitat

management disciplines
- technology management
- business management
- process management
- quality assurance
- project management

classical disciplines
- mathematics
- physics
- chemistry
- biology
- medicine
- economics
- computer science
- mechanical engineering
- electronical engineering

human sciences
- psychology
- sociology
- pedagogy
- anthropology
- theology

standardisation bodies, professional societies
- IEEE
- ISO
- ACM
- IFIP
- INCOSE

communities, conferences
- requirements engineering
- reliability engineering
- product lines
- SW architecting
- TRIZ
- RUP

system architecting

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FARcontext
System architecting research: to do

case studies

industry as laboratory
large scale research

methods

reliable systems
fast innovation
secure systems
maximum performance
design for testability
lowest cost

frame of reference

taxonomy
framework
objectives
principles

glossary
ontology
heuristics

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