

VoSE 2019

Challenges

Challenge 1: Construction of SUMMs

- What to include in the SUMM
- Compositional approaches for SUMMs, Definition of conceptual models

Challenge2: Pragmatics of Consistent Modelling

- Dealinng with uncertainty
- Deading with incomplete information
- Islands of allowed inconsistencies
- transactionality

Challenge 3: Definitions of Consistency

- Hierarchy of consistency rules
- Inter-view consistency
- Intra-view consistency → proactive approaches usable
- (the same when resolved in the SUM)
- View-sum consistency

Challenge 4: Evolution of VoSE-Systems

- Adding View-types / Meta-Models
- Evolving View-types / Meta-Models
- What does this mean to SUMMs and SUMs?

Challenge 5: Defining Mechanisms for VoSE

- Consistency restoration strategies
- Definition of View-types
- Deriving Editors (with declarative specifications)
- Incremental view update
- Propagation of delta-changes
- Understanding differences between textual and graphical syntaxes
- Using concrete syntaxes for viewtype definition

Challenge 5: Scalable VoSE

- Scalability in terms of
 - Number of view-types
 - Size of instance-models

Aspects of a Challenge for VoSE 2020

- Keeping views of a small CPS consistent (e.g., house automation)
- Goals of the show case: (??)
 1. show pros and cons of different approaches of VoSE
 2. ~~show benefits of VoSE over other SE approaches~~ (→ magazine article)
- stepwise organisation over several years
- Scope the level of commonality required by the participants
- Requirements written with the underlying challenges in mind, requirements to the viewtypes and views, mandatory viewtypes, but optional ones if needed to show benefits of specific approach
- When models are defined of the challenge, than they must be simple and small. (Benefit: comparability of results)
- Tasks of the challenge:
 - Building views (with a given SUM)
 - **Building SUMM (out of given view-types)**
 - Evolve SUM, add views

- Start with simple example and also ask what is needed for extension to show actual problem of the research group

- Bellairs workshop
- SoSym special issue (ASAP)
 - Call nov
 - Deadline summer 2020
- Dagstuhl proposal für Nov 2020

General statement

- A systematic VoSE approach is required (either SUM, RSUM, VSUM)
 - (less ad hoc)
- View consistency is a challenging problem
- There is a need for consistency management
- Consistency-driven view oriented Software Engineering
- New name of the field: „Multi-view Modelling“