

MoVES

Modelling, Verification and Evolution of Software

WP I

Programming Languages

MoVES Annual Event

Carlos Noguera

7/12/2011

Participants

- KUL
- UCL
- VUB (leader)
- ULB
- INRIA

WP Goals

- Investigate state-of-art abstraction techniques in programming language technology to map abstract and high level models onto executable models.
- How to compose these models from both hierarchical and aspectual perspective.

WP Topics

- 3 topics:
 - TOPIC 1: Genericity in aspect languages
 - TOPIC 2: Domain specificity in composition languages
 - TOPIC 3: Verification of compositions

TOPIC I: Genericity in aspect languages

- Robust Aspect Languages (VUB/KUL/INRIA)
- Context-Oriented Languages (VUB/UCL)
- Aspect Mining and Re-Engineering (VUB/INRIA/UA/TUDeft)

TOPIC 2: Domain specificity in composition languages

- Modeling Composition at a higher Level (VUB/INRIA)
- Model-Based Pointcuts (VUB)
- Visualization of COBOL programs(VUB)
- Feature-Oriented Programming and Context-Oriented Programming (VUB/UCL)

TOPIC 3: Verification of compositions

- Verification of Multi-threaded programs (KUL)
- Ambient Contracts (UCL/VUB)
- Program Evolution (VUB/UCL, VUB/INRIA)
- Aspect Composition (ULB, VUB)
- Language constructs for composition (VUB/KUL)

Events

Events organized network wide in topics related to WPI.

- Conferences
 - AOSD 2008, WCRE 2008
- Recurrent workshops
 - PLATE, COP, LATE, BENEVOL, ...

Success Stories

- Co-tutelles (VUB-INRIA, VUB-UCL)
- FWO Project on Robust Invasive Software Composition (AIRCO)
- Long-lived collaboration VUB/UCL

The past 5 Years

- Rocky History
- Bottom-up approach to collaboration
- Successful, but short-termed
- Crosscutting themes
- Dealing with loss of interest/manpower on a topic

Lessons Learned

- Stable, strong lead, stable working groups
- Extrinsic motivators for collaboration
- Balancing WP-wide effort with punctual collaborations
- Wider research topics, while remaining distinguishable from other WPs