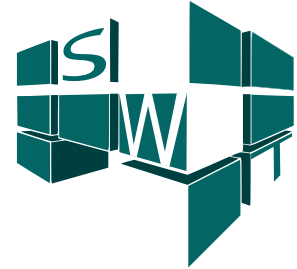


# *Chair of Software Engineering*

*<<http://swt.informatik.uni-mannheim.de>>*



School of Business Informatics  
and Mathematics





- Prof. Dr. Colin Atkinson (since 2003)
  - Previously at Fraunhofer IESE, TU Kaiserslautern and University of Houston



→ 6 researchers



Oliver Erenkämper



Ralph Gerbig



Marcus Kessel



Thomas Schulze



Marcus Schumacher



Christian Tunjic

→ 3 Robots



→ HiWis

Stefan L.



## 1. Model Driven Development

- Multi-Level-Modeling
- MELANEE Modeling Tool

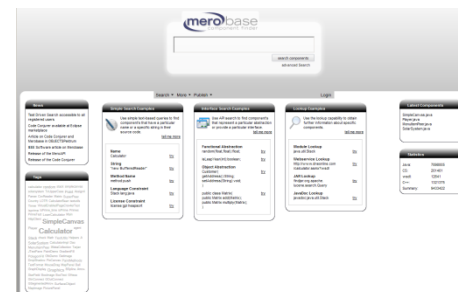


## 2. "Green IT"

- Green SLAs
- Federated Data Centers
- e-Mobility

## 3. Software Reuse

- Code Recommendation Systems
- Test driven reuse with Merobase and Code Conjurer
- Ranking Components for Reuse

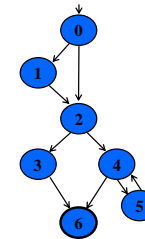




- **Bachelor**
  - Softwaretechnik
    - *Grundlagen der Softwareentwicklung*
  - Software Engineering Praktikum
    - *Team project*
  
- **Master**
  - Advanced Software Engineering
    - *Software Specification, Software Testing, ...*
  - Model-Driven Development
    - *MDA, CIM, PIM, PSM, DSL & weitere TLAs...*
  - Enterprise Architecture Modeling
    - *RM-ODP, Archimate, Zachman, OSM*
  - Team projects and Seminars
    - *Several projects*



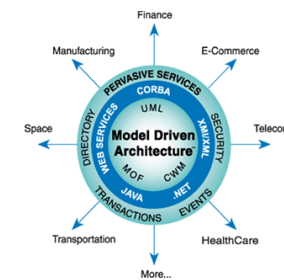
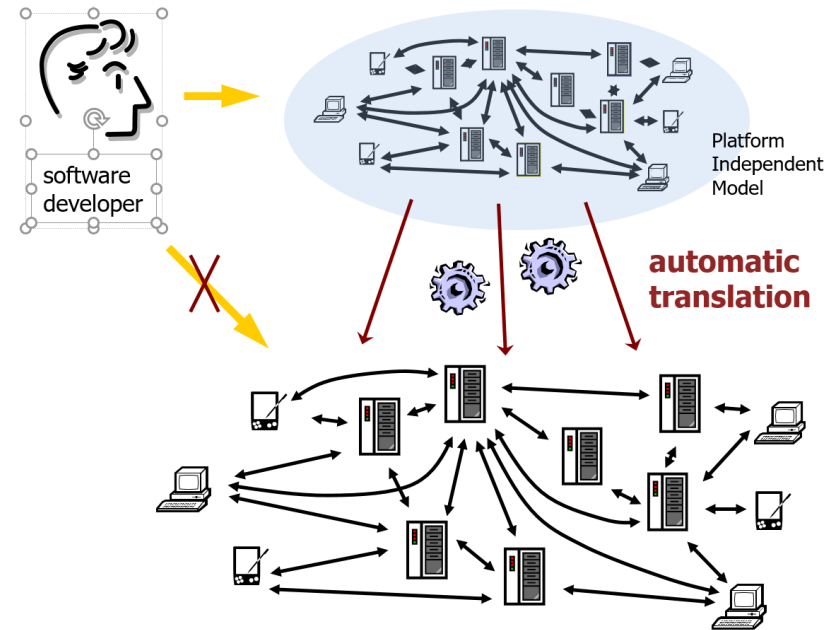
- Foundation course
- HW semester
- English
- ECTS: 6
- Main topics
  - Model-based, multi-view system specification
  - Test design and description
  - Black-box testing approaches
- No pre-requisites
- Evaluated by a single written exam



	A	B	C	D
1	'Stack	create		
2	D1	push	23	
3	D1	push	42	
4	D1	pop		42 23
5	D1	pop		C2



- Specialization course
- HW semester
- English
- ECTS: 6
- Main topics
  - Metamodeling
  - Object Constraint Language (OCL)
  - Model transformation
  - Multi-level modeling
- Prerequisites: Advanced Software Engineering
- Evaluated by a single written exam





- Specialization course
- FS semester
- English
- ECTS: 6
- Main topics
  - Enterprise Architectures
  - Multi-View Specification
  - EAM Standards
  - Archimate
- Prerequisites: Model-Driven Development
- Evaluated by a single written exam

	What?	How?	Where?	Who?	When?	Why?	
Planner							Scope (contextual)
Owner							Enterprise model (conceptual)
Designer							System model (logical)
Builder							Technology model (physical)
Sub-contractor							Detailed representations (out of context)
	Data	Function	Network	People	Time	Motivation	

