Seminar Proposal
- Agile Techniques in Software Development

Background:
Agile techniques bring a new philosophy and are becoming a tendency in recent software development. A lot of companies expect that their employees (including managers and developers) could have a background knowledge of agile techniques. Agile techniques embrace more communication and collaboration rather than comprehensive documentation and process. Agile techniques embrace responding to change over following a plan. It covers a huge amount of practices in software development (XP), software project management (Scrum), business development (lean startup) and so on. However, the understanding of agile techniques should not stop at the theory-level or technique-level. We need to focus on real problems in practice.

Thus, we propose “Agile Techniques in Software Development” as a seminar for bachelor students majoring in software technique or related areas. We aim to investigate the some real problems deeply in modern agile development.

Planned topics
- Agility and speed (Lean startup)
- Managing technical debt
- Communication in agile teams
- Agile in distributed organizations
- Agile requirements engineering
- Knowledge sharing
- From agile software development to DeVops
- Agile organization transition
- Agile techniques for hardware
- Documentation in Agile Development
- Tool Support for Scrum
- Large-Scale Agile
- Variants of Scrum
- Agile Testing Strategy in Scrum
- Scrum and Test-driven development
- Value of Behavior-Driven Development Test (BDD) in the scrum
- Tools support for Agile Testing
Organization
Participants’ number: 14.
Examination: writing paper and oral presentation with discussion.

Contact
Yang Wang
Institute of Software Technology, Software Engineering Group
yang.wang@informatik.uni-stuttgart.de