Seminar: Behavioral Software Engineering

- Institute of Software Technology, Software Engineering Group
- Sommersemester 2019

Time and Room

Mondays, 15:45–17:15, 0.447.

General Topic

Behavioral software engineering is a growing area of research, which bridges behavioral science disciplines such as psychology, cognitive science, and sociology with software engineering. It describes how human affect, behavior, and cognition influence individual aspects as well as organizational aspects in software engineering. In this seminar we want to take a look at some topics that are being investigated.

Please note: The whole seminar will be held in English.

Topics (preliminary)

The following topics will be covered:
- How does self-efficacy influence learning to program?
- What motivates software engineers?
- Commitment models in software engineering
- Stereotypes in software engineering and their psychological consequences
- Effect of stress in software engineering
- Behavioral aspects of the effects of leadership and leadership styles in software development teams.
- Behavioral aspects on why women are underrepresented in software development
- Behavioral aspects on why developers quit their jobs
- Different cognitive styles of team members
- How and why do new ideas spread?
- Why is new technology (not) accepted?
- Conflicts in teams and their mediation
- Work-life balance and job satisfaction in software engineering
- Punishments and rewards in software development
- Human related factors influencing productivity in software development
- Emotions, moods, and their relationship with performance in software development
- Culture in software development companies
- The relationship between wellbeing and software development
- Would brainstorming benefit the software engineering process?

For each topic, 2–3 reading sources will be provided. These are just suggestions and meant as a first entry to the topic. It is part of the seminar task to find further reading material. The list of topics is preliminary. The final list will be available in due time.

Organization

The seminar will be held by Dr. Daniel Graziotin.
The examiner is Prof. Dr. Stefan Wagner.
For questions please contact daniel.graziotin@iste.uni-stuttgart.de