

## Invitation to lecture series „Simulation Sciences“

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Wednesday, January 13th 2016, Room 0.101, Institute for Computer Science, University of Göttingen, 3:30 pm

**Dipl.-Inf. Daniel Honsel**

**Dipl.-Math. Verena Honsel**

**Marlon Welter, M.Sc.**

**Institute for Computer Science, Georg-August-Universität  
Göttingen**

will talk about

### **Agent-Based Modeling and Simulation of Software Processes for Quality Assurance**

#### Content of the lecture:

Project managers have to make decisions concerning the architecture, development strategy or team constellation and they have to estimate the consequences of the decisions. To have tool support for testing the interplay of different parameter constellations would be of great help. We created a simulation tool that can predict possible future scenarios and that makes the project manager aware of risky development trends. For the creation of this tool, understanding software evolution and its drivers is indispensable. To get a model with parameters close to the reality we examined Open Source Software (OSS) projects by repository mining and estimated the simulation's parameters from the gained insights. With the parameters we instantiate an Agent-based simulation of the software project which can be evaluated by project managers using Conditional Random Fields (CRFs) to gain the desired information about development trends.

Guests are welcome.

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The SWZ is a common interdisciplinary research facility in simulation science of

The lecture will be held in this building:

**Room 0.101**

**Institute für Computer Science, University of Göttingen  
Goldschmidtstrasse 7  
37077 Göttingen**

