

informatik-Kolloquium

Der Fachbereich Informatik der Johannes Kepler Universität Linz¹ lädt in Zusammenarbeit mit der Österreichischen Gesellschaft für Informatik (ÖGI) zu folgendem Vortrag ein:

Topic: **VM composition and VM warmup**

Presenter: **Dr. Laurence Tratt,**
Software Development Group, Kings College London

Date: **Tuesday, May 17, 2016, 16:00**

Location: **JKU, Science Park 3, Room 218**

Abstract: Programming languages are islands, each disconnected from the rest. We choose a language for a task and, for better or worse, stick with it. Communicating between programs written in different languages is such a slow, arduous, task that we avoid doing it whenever possible.

In this talk I will first show how language composition can lower, and even remove, the barriers between languages. We have pioneered new approaches to the two major challenges in language composition: editing and running composed programs. Using our novel editor 'Eco', users can write source files that contain fragments of multiple languages. We then run multi-language programs using composed meta-tracing VMs. Our preliminary results suggest that performance of composed programs is often competitive with traditional mono-language VMs.

I will then show ongoing research into understanding VM warmup. Our research suggests that the classical model of VM warmup may no longer reflect VM performance in the real world.

This is joint work with Edd Barrett, Carl Friedrich Bolz, Lukas Diekmann, Geoff French, and Sarah Mount. More at <http://soft-dev.org/>.

Short Bio: Laurence Tratt is a Reader in Software Development at King's College London where he leads the Software Development research group. He designed the Converge programming language, and has contributed to projects such as Eco, Unipycation, and PyHyp..

*Einladender: Univ.-Prof. Dr. Hanspeter Mössenböck.
Institut für Systemsoftware*

¹ Der Fachbereich (<http://informatik.jku.at>) besteht aus folgenden Instituten:
Application Oriented Knowledge Processing (FAW), Bioinformatics, Computational Perception, Computer Architecture, Applied Systems Research and Statistics, Computer Graphics, Formal Models and Verification, Networks and Security, Integrated Circuits, Pervasive Computing, Software Systems Engineering, System Software, Telecooperation, Signal Processing