

informatik-Kolloquium

The Department of Computer Science of Johannes Kepler University Linz¹ together with the Austrian Society of Computer Science (ÖGI) invites to the following talk:

Topic: **Software Product Lines: Reliability and Beyond**

Presenter: **Dr. Vander Alves,**
University of Brasilia, Brazil
CAPES-Alexander von Humboldt Fellow at University of Passau, Germany

Date: **Monday, September 18th 2017, 10:30 – 11:30**

Location: **JKU, Computer Science Building (Science Park 3) room 078**

Abstract: In this talk, we first present a scenario in the Body Sensor Network domain to motivate the development of reliable and maintainable dynamic software product lines. Next, we describe supporting process and architecture. We then define a feature-family-based reliability analysis strategy of software product lines and report on empirical results comparing this strategy to others. The abstract structure relating such analyses is then discussed by focusing on their semantic equivalence. Following, we present initial ideas on proposing an extractive strategy to bootstrap a product line of analysis tools and then evolve it with a reactive strategy to consider other properties. The products of such product line comprise analysis strategies and corresponding formalization for a given property and corresponding models. Finally, we report on the development of a domain modeling approach to support experimental studies.

Vander Alves, <https://sites.google.com/site/vander Alves/home>

Dr. Vander Alves is Adjunct Professor at the Computer Science Department of the University of Brasilia, Brazil, and CAPES-Alexander von Humboldt Fellow at University of Passau, Germany. Previously he was a post-doctoral researcher at the Product Line Architectures department of the Fraunhofer Institute for Experimental Software Engineering, Germany, where he participated in projects in the Ambient Assisted Living domain. Prior to that, he was a post-doctoral researcher at Lancaster University, England, having worked in the EU AMPLE project in the field of Aspect-Oriented, Model-Driven development, and Software Product Lines. He also worked at the IBM Silicon Valley laboratory in San Jose, California, in the implementation of the Information Integration product line, which led to a registered patent at the US Patent Office. He holds a doctoral degree in Computer Science (Software Engineering) from the Federal University of Pernambuco, Brazil. His areas of current research are Software Product Lines, Dependability Analysis, and Body Area Network.

Organizers::

Ass.-Prof. Dr. Iris Groher (iris.groher@jku.at; <https://www.se.jku.at/iris-groher>), SE, JKU Linz

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The department consists of the following institutes::

Application Oriented Knowledge Processing (FAW), Bio Informatics, Computational Perception, Computer Architecture, Computer Graphics, Formal Models and Verification, Networks and Security, Integrated Circuits, Pervasive Computing, Software Systems Engineering, System Software, Telecooperation, Signal Processing



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