# Product Architecture Design

The Summer School is a result of research collaboration among Prof. Kevin Otto at Aalto University, Prof. Dieter Krause at Hamburg University of Technology, and Prof. Seung Ki Moon at Nanyang Technical University.

> Prof. Kevin Otto Aalto University



Prof. Dr.-Ing. Dieter Krause Hamburg University of Technology

> Prof. Seung Ki Moon Nanyang Technical University



# Aalto University

The PAD will be held on campus at Aalto University, which is located in Espoo, a suburb of Helsinki Finland.

The Design Factory Aalto University Betonimiehenkuja 5C 02150 Espoo, Finland



## Written application until 30 April 2018

The application (one page) should contain:

- § Affiliation and supervisor
- § Research topic
- § Start and expected end of your research topic/ of your PhD project
- § Interconnection to product architecture design

Please apply via email (<u>michael.hanna@tuhh.de</u>). You will be notified about your acceptance until 30 April 2018.

The International Summer School is free of charge due the sponsoring by the our Universities.

The number of participants is limited to 20 persons!

For further information concerning application and registration please visit our website. Updates on program outline and other general information will be also published here: www.tuhh.de/pkt/pad/

or contact Michael Hanna, M.Sc. Telephone: +49 40 42878 3161 Email: michael.hanna@tuhh.de



5<sup>th</sup> International Summer School "Product Architecture Design – PAD" at Aalto University

4-8 June 2018



## 4-8 June 2018

## www.tuhh.de/pkt/pad/

## Concept

The 5<sup>th</sup> International Summer School "Product Architecture Design – PAD" will be held at the Design Factory at Aalto University. Its objective is to bring together national and international young scientists and post-graduate students who are currently doing research in the field of product architecture and modularity.

Multiple advantages can be gained by using modular or platform product architectures. However, product architecture design generates challenges in product development.

Participants get the opportunity to broaden their knowledge on product architecture research with handson exercises, while plenary discussions give a diverse view on product architecture. There will be opportunities for idea generation and networking with fellow researchers. Group tasks on approaches, tools and concepts using a common case study will emphasize experiences sharing and knowledge transfer between participants.



Data to the common case study will be accessible before the workshop, so that the participants have the opportunity to prepare themselves. The case study will be about a product family of robot vacuum cleaners and has already been successfully applied in several previous workshops. It is therefore a suitable basis for the exchange of different approaches on product architecture and modularity.

# Preliminary program outline

- Start of summer school on Monday, 4 June at 1 pm
- End of summer school on Thursday, 7 June at 6 pm
- Additional Modular Platform Design Industry Workshop on Friday, 8 June (all are welcome)

## Monday, 4 June

- Motivations, problems and challenges of product architectures
- Research activities of participants
- State of the art review of modularity research (Prof. Otto, Aalto University, Finland)



#### Tuesday, 5 June

- Sustainable product architecture and platform assessment (Prof. Moon, Nanyang Technological University, Singapore)
- Impact of modular product structures on cost and other economic criteria (Prof. Krause, Hamburg University of Technology, Germany)



#### Wednesday, 6 June

- Platform design flows of alternative methods (Prof. Otto, Aalto University, Finland)
- Method validation in model-based modular product design (Prof. Krause, Hamburg University of Technology, Germany)

#### Thursday, 7 June

- Product architecture and modularity research areas breakout discussions
- Presentation and discussion of the results in plenum
- Handout of certificates (successful participation can be awarded with 3 credit points)

#### There will be also

Evening programs and tour of Helsinki Modular breakfast on Tuesday, 5 June Optional Industry Day on Friday, 8 June

# Feedback from PAD 2016

