

Ralf Klamma (RWTH Aachen), Martin Wolpers (Fraunhofer FIT)

# INDUSTRY 4.0

# Special Session Agenda

14:00-15:15 Industry 4.0

14:00-14:15 Introduction by Martin Wolpers, Ralf Klamma

14:15-14:45 Learn but Work! Towards Assisted Self-directed Learning

Mario Aehnelt

14:45-15:00 Assist.- and Knowl.-Services for Smart Prod.

Michael Dietrich

15:00-15:15 Requirements and challenges to employees and managers in the era of industry 4.0.

Martin Wolpers

Great, we have time to discuss!



## SIG Wearable-Enhanced Learning (WELL)

# SIG Wearable-Enhanced Learning (WELL)

Wearable technologies – such as smart watches, smart glasses, smart objects, smart earbuds, or smart garments – are breaking the established ground and offer new opportunities. These devices are body-worn, equipped with sensors and conveniently integrate into leisure and work-related activities including physical movements of their users. According to the recent forecasts (e.g. Cisco, Gardner, Deloitte) for 2018, portable technologies, including mobile and wearable devices, will form the basis of personal communications with the global wearable device data traffic increasing by over 60%.

Wearable user interfaces are just starting to transform user experience, improving integration of technologies into everyday life, education, and work. Since wearable technologies are likely to shape the future relationship between humans and computers, it is essential to look beyond the still mostly desktop-driven, narrow perspective of how technologies may enhance learning. We think that the Wearable-technology Enhanced Learning (WELL) is beginning to emerge as one of the earmarks of the transition from the desktop age through the mobile age to the age of wearable, ubiquitous computing.

## Join

Join the Google Group to keep up to date (EA-TEL membership recommended, but not required):

<https://groups.google.com/d/forum/sig-well>

## Events

**!! EC-TEL 2015 Design Challenge – Envisioning Wearable Enhanced Learning !!**

<http://ea-tel.eu/special-interest-groups/well/>



# J.UCS – Papers invited!



<http://www.jucs.org/>



# About the authors - Mario Aehnelt

**Fraunhofer IGD** in Rostock, Deutschland.

## **Working area**

Erforschung von Assistenztechnologien zur Verschränkung von Wissens-, Lern- und Arbeitsprozessen im Bereich Produktion und Wartung

## **Focus**

**kognitive Automatisierung von manuellen Arbeitsprozessen in der Montage.**



Senior Software Engineer am Center for Learning Technology im Deutschen Forschungszentrum für Künstliche Intelligenz (DFKI)

## Working area

Entwicklungen im Bereich der KI-basierten Systeme

## Projektübersicht:

- FRP 7 Math-Bridge Projekt
- BmbF Verbundprojekt "Praktische klinische Kompetenz"
- EFRE geförderten Projekt "Kompetenzbrücken"



# Zu den Vorträgen

## **Learn but Work! Towards Assisted Self-directed Learning**

Mario Aehnelt

## **Assist.- and Knowl.-Services for Smart Prod.**

Michael Dietrich

## **Requirements and challenges to employees and managers in the era of industry 4.0**

Martin Wolpers

