

# Weihnachten 2018



# Highlights

- Jahrgang AU18 Studiengangs AuTec
  - 75 Studierende (größter SG im FB: INW)
  - 10 Dozenten
  - 7 Akademische Mitarbeiter
- Ausbau der Technika (T-PPA/EAM/RT)
- Konferenzen: xPlore, AALE, InnoTesting, i-ESA
- Solarboot SUNcaTcher: 2x1. Platz + 2. Platz Wildau
- Projekte:  
SmCoCo, SPICE, HFB, TelHydrA, LTAfit, vaionic, InnoHub13
- Erster Jahrgang im Studiengang AEM



# HANNOVER MESSE

**Industrial Automation**  
Internationale Leihmesse für Fertigungs-  
maschinen



world's first truly  
collaborative dual-arm robot

A precise, dual-arm collaborative robot for small part assembly with state-of-the-art motion control. It is the world's first truly parallel robot, designed to work safely side-by-side with people without the need for safety fences or barriers.

It can be quickly and intuitively programmed online, no specialized training or past robot experience is required. The name 'Multi stands for us and me, working together to create endless possibilities.' Because it has the potential to enable entirely new manufacturing applications that we have never been possible before.







# Leben im Studiengang





TH Wildau– Regatta  
2. Platz (08.09.2018)

# IPK - Business Game 2018



- **Prof. Dr. Jörg Reiff-Stephan**  
*Automation Technology*
- **Prof. Dr. Rainer Stollhoff**  
*Data Science (Statistical Learning, Analytics)*
- **Prof. Dr. Alexander Stolpmann**  
*Image Processing*



## Research Engineers at iC3@AI/ML

- Kay Ritzmann M.Eng.
- Sebastian Schulz M.Eng.
- Ron van de Sand M.Eng.



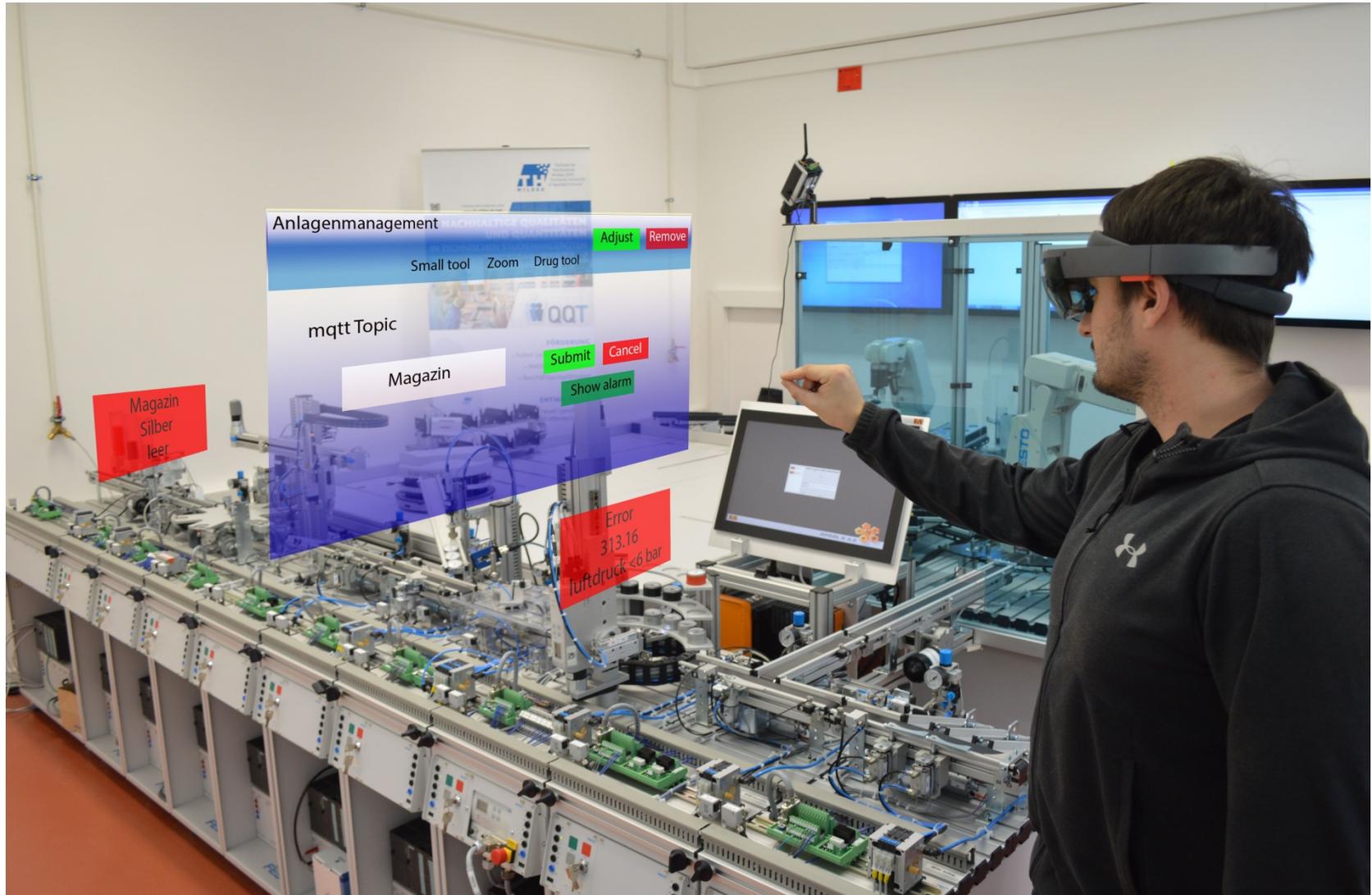
# Smart Factory // Advanced Manufacturing

Shop floor IT in CPPS



- "Advanced manufacturing centers upon improving the performance of US industry through the innovative application of technologies, processes and methods to product design and production."(TNTECH.EDU)
- White House and states: "A concise definition of advanced manufacturing offered by some is manufacturing that entails rapid transfer of science and technology (S&T) into manufacturing products and processes." (PCAST, April 2010)

# Augmented Reality for Production Applications

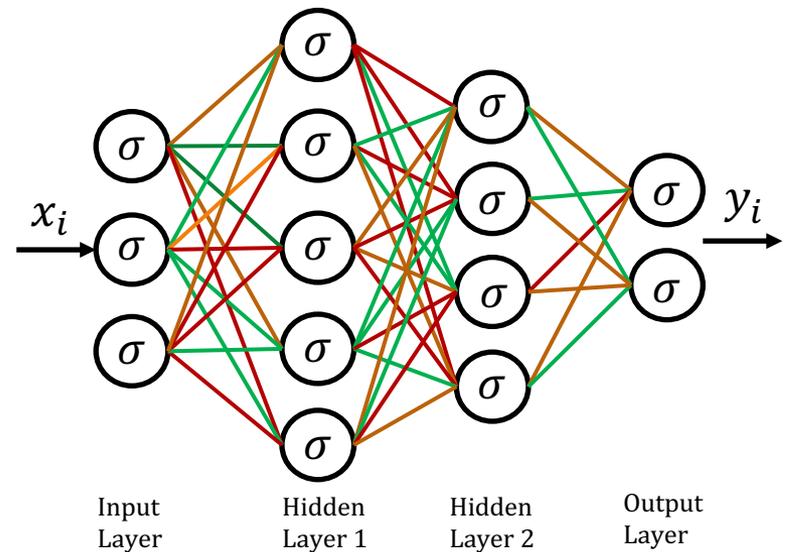
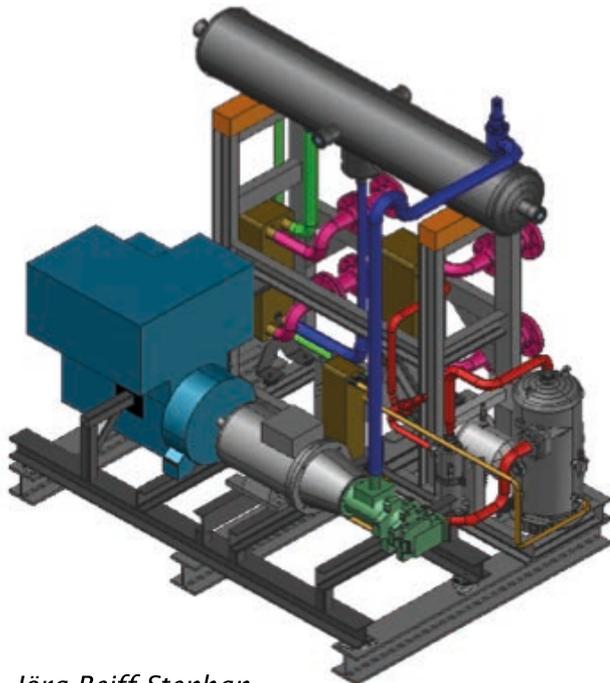


# SmCoCo – Smart Cooling Control

SME .. pakt, Potsdam → Approach: multilayer perceptron (MLP)

## Features of the new Refrigeration Plant System:

- fully automated **plant monitoring** (self-monitoring, DB-based, trend analysis)
- **time reduction of inspections** up to 60%
- **improving the plant availability** due to reduced disturbances as a result of predictive maintenance control
- **energy savings** due to weather based predictive models



**Approach:** multilayer perceptrons

# Herzlichen Dank und ein frohes Weihnachtsfest

Unser iC3-„Aufbau“-Team:

- Christopher Brüllke
- Norman Günther
- Oliver Jander
- Noreen Koch
- Andreas Krispin
- Bernd Kukuk
- Andy Langer
- Md. Niaz Morshed
- Prof. Jörg Reiff-Stephan
- Kay Ritzmann
- Prof. Jens Rüdiger
- Md. Jewel Samsuddoha
- Samar Samara
- Ulrich Schauer
- Sebastian Schulz
- Prof. Alexander Stolpmann
- Ron van de Sand
- Sonja Wallschlag

