

# Universal Toolchain for Systemintegration with Microsoft Power BI & Azure

## Target group:

- Praxisprojekt + BA
- Pro2
- Master Mechatronics Project
- Master-Thesis

## Project description:

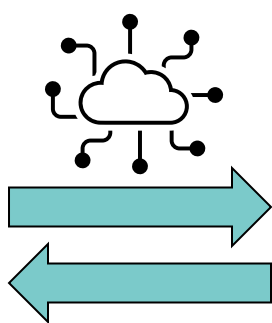
The digital transformation of industry presents companies with the challenge of making their production processes more efficient, flexible and transparent. The use of modern IT technologies such as OPC-UA for industrial communication and integration using the Microsoft Tool-chain for data processing and analysis offers innovative approaches.

## What you can expect:

- You will explore the various components of the Microsoft toolchain, including Azure IoT Hub, Azure Stream Analytics, Power BI, and more, in terms of their applicability for monitoring and controlling assembly processes.
- Experimentally validate integration possibilities of OPC-UA and IO-Link.
- Automation mechanisms for the development of dynamic UIs, business processes and guided assistance in the work context.
- Develop your own data management and data analysis services.

## What you should bring:

- Interest in practical implementation of your own services under Microsoft.
- No fear of learning different programming languages.



## Get in touch:

**Prof. Dr.-Ing. Jörg F. Wollert**  
Raum 02 303  
Telefon +49.241.6009 52503  
Email [wollert@fh-aachen.de](mailto:wollert@fh-aachen.de)

**M.Sc. Johannes Hug**  
Raum 03 040  
E-Mail [hug@fh-aachen.de](mailto:hug@fh-aachen.de)