

## STELLENAUSSCHREIBUNG WHK/SHK

**Prof. Carsten Wolff** – Institute for the Digital Transformation of Application and Living Domains

### **The Institute for the Digital Transformation of Application and Living Domains**

IdIAL is the first central scientific facility (according to §29 (1) of NRW university law) of Dortmund University of Applied Sciences and Arts and therefore a visible element of the scientific profile. The institute constitutes a hub in the technology park Dortmund for trans-disciplinary and participative research into the challenge of digitalisation of important life and work spaces. The success of this institute will be measured by how far it succeeds, by implementation oriented collaboration of the players from science, business and society, in finding solutions that harness the digitalisation trend to truly and tangibly benefit people.

### **Job description**

The APPSTACLE project started in 01.2017, lasts till 12.2019, and addresses applying Eclipse IoT- and Cloud technologies to the automotive domain. Eclipse Kuksa is the code base of APSTACLE. FH-Dortmund concentrates on in-vehicle and cloud development activities and recently setup (a) an Eclipse Che workspace, (b) a Kuksa-adapted AGL build environment, and (c) a Rover as a use-case demonstrator. There is a huge amount of open topics such as (I) OTA-updates via HawkBit, (II) an App management (store) environment, (III) edge computing implementation using Eclipse fog05, (IV) MQTT message visualization using Eclipse MQTT-Spy, (V) applying sparkplug definitions and implementations to Kuksa (Eclipse Tahu), (VI) implementing a CoAP adapter for Eclipse Hono, and more.

The WHK/SHK job can be conducted during regular studies and usually incorporates 8-20 hours per week.

### **Job requirements**

- Basic knowledge of IoT technologies (MQTT, REST, ...)
- Linux experience helpful (Yocto, Bash, Cmake, ...)
- Versioncontrol basics (Git)
- Java, C, C++, Python experience

### **Contact**

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