

## Contact



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## Interests >> Partners

### We are looking for R&D cooperation partners, e.g., in the fields of

- Diagnosis, Test & Verification of Dependable Systems
- Industrial Automation, Electronic Control Systems
- Automotive Electronics
- Wireless Communication Networks (e.g., IoT)
- Smart Homes & Building Automation
- Assistive Technologies & Assisted Living

### We are looking for challenging

- Internships for *Bachelor-Students in Electronic Engineering, Smart Homes and Assistive Technologies*
- Diploma topics for *Master-Students in Embedded Systems*

## Expertise >> Reference Projects

### Our team provides know-how and experiences in the following areas

- Software Design for Embedded Systems
- Hardware Design (PCB, FPGA, ASIC)
- Electronic System Level Design
- Distributed Systems, Real-Time Systems
- Diagnosis, Debugging, Test, and Verification
- Communication and Automation Networks
- Smart Homes & Assistive Technologies

### Reference Projects:

#### **STEACS** – Systematic Test of Embedded Automotive Communication Systems

*In the context of this FIT-IT funded R&D project we developed test & diagnosis tools and concepts for remote testing of future automotive electronic systems based on FlexRay in cooperation with the OEM partners BMW and DaimlerChrysler.*

*Project Partners: Decomsys GmbH, ECS Group UT Vienna*

#### **DECS** – Design Methods for Embedded Control Systems

*This FHplus funded project addresses the topics of (i) formal specification and verification of embedded control system architectures and, (ii) elaborate test and diagnosis tools for distributed embedded systems with a focus on automotive communication systems.*

*Cooperations with Audi Venture Electronics GmbH, RWTH Aachen*

#### **COORDES** – Coordinated Test, Debugging, and Diagnosis in Distributed Embedded Systems

*In the course of the research project COORDES (Research Studio Austria funding) a new, patented solution which enables coordinated test, debugging, and diagnosis in distributed embedded systems is realized using FPGA as well as ASIC prototyping.*

*Follow-up projects with Oregano Systems, hME, ...*

#### **AsTeRICS** – Assistive Technology Rapid Integration and Construction Set

*In the course of this international Framework 7 Collaborative Project funded by the European Commission, flexible and affordable setups for user driven Assistive Technologies dedicated to people with severely reduced motoric capabilities will be developed and explored.*

*Cooperation with 8 national / international partners*

#### **ViTAL** – assistive domoTics for Autonomous Living

*The project assistive domoTics for Autonomous living deals with the development of technologies to support daily live activities of elderly and disabled persons. Within the project assistive domotics with special focus on smart homes, e-health as well as assistive robotics will be integrated into a safe and secure platform.*

#### **JRC VECS** – Josef Ressel Centre for Verification of Embedded Computing Systems

*The Josef Ressel Center for Verification of Embedded Computing Systems makes state-of-the-art scientific verification technologies applicable for industrial use and investigates new technologies, tools, and methods. In particular, we will develop a flexible runtime unit that will facilitate testing and functional checks whilst the system is operational.*

*Project Partners: Infineon AG, Siemens AG, Kapsch TrafficCom AG, Bluetechnix GmbH, Loytec electronics GmbH, Oregano Systems GmbH*