Products and Production Systems of the Future



Pro²Future – Products and Production Systems of the Future – is a COMET competence center that attempts for next generation products and manufacturing machinery with embedded cognitive capabilities. It is a joint effort of world leading Austrian industrial enterprises and the nation's top scientific institutions in ICT and Production Engineering: Johannes Kepler University Linz, Graz University of Technology and Profactor GmbH. Furthermore, it is endorsed by the Provinces of Upper Austria and Styria, Austria's strongest regions in industrial leadership. Pro²Future operates three research sites in Linz, Graz and Steyr.

To broaden and support our research activities in the field of cognitive radios we are currently offering the position of a

Researcher

Full-time (38.5 hours/week), at Pro2Future GmbH in Graz (Campus Inffeldgasse, TU Graz)

Project context:

The advent of the Internet of Things (IoT) paradigm has precipitated an ever-growing number of wireless communication technologies and protocols. For their industrial application such protocols must exhibit high levels of dependability to continuously satisfy given use-case requirements. As the environment can have a crucial impact on a protocol's dependability, the project investigates design methods for cognitive wireless networks which allow for the dynamic and seamless selection, configuration and or adaption of wireless protocols during runtime in order to ensure optimization and failover functionality.

Job profile:

The successful candidate will be engaged in designing and implementing cognitive wireless networks. To this end, one or more of the following skills are required: knowledge on wireless communication protocols and networks, experience with Internet of Things and embedded software engineering. Experience in the field of software development is also an advantage. The successful candidate seeks an ambitious activity in industry-driven research and is particularly willing to obtain a PhD in Computer Engineering under supervision of Prof. Dr. Kay Römer at the Graz University of Technology.

The successful candidate will work within an interdisciplinary project team consisting of experts including industrial partners, project management team, and scientific partners. The candidate plays a major role in shaping and executing the project's research agenda. The project work will also involve collaboration and knowledge exchange with Pro²Future partners, several allied international research groups, as well as active participation in the international research community.

Your qualification:

- A university-level Master's degree in computer science, information systems, information science, electrical engineering, telematics, or related studies.
- Strong interest in wireless communication protocols and networks for the Internet of Things.
- Programming skills in a current development environment (C++, C#, Python, Go, Rust, Java).
- Practical experience in implementing communication protocols and applications on embedded low-power microcontroller platforms using OSs such as TinyOS, Contiki, RIOT, etc.
- Knowledge of network management platforms for IoT and wireless/mobile service management techniques.
- Fluent English, written and spoken. German is appreciated, at least the willingness to learn German.

We offer:

- The opportunity to align your PhD research with an industrial research project.
- The opportunity to work in a young, dynamic, creative and collaborative team with strong ethos of mentorship and professional development as well as focused publication agenda.

- We will provide the successful candidate with a collegial and supportive environment to establish themselves and their careers, i.e. particularly the Ph.D. studies.
- A full-time gross salary of 2,819 Euro per month (14 times a year).

Pro2Future GmbH is an equal opportunity and family-friendly employer. We particularly welcome applications from women.

To apply for this position, please send your application (including CV, supporting documents and letter of motivation) via email to: jobs@pro2future.at