



Cognitive and Sustainable Products and Production Systems of the Future

Pro²Future – Cognitive and Sustainable Products and Production Systems of the Future - is an industry-related COMET K1 research Centre in the field of artificial intelligence (AI) and cognitive / industrial ICT, human-machine-interaction (HMI) and data-driven process optimization with a focus on cognitive and sustainable products and production systems. These are supported by the areas of Perception, Orchestration and Analytics. Further fields of activity of the Centre cover mechatronic systems, embedded systems, pervasive computing systems and big data analytics.

For strengthening our team, we are currently offering the position of a

Ph.D. Researcher (m/w/d) within the Area Cognitive Products

Full-time (38,5 hours/week), at Pro²Future GmbH in Graz (Campus of TU Graz)

Project context

The Area Cognitive Products at Pro²Future GmbH is dedicated to the development of intelligent, adaptive products that incorporate cognitive capabilities. These products are designed to reason with structured knowledge, learn from experience, explain their behavior, reflect on their performance, and respond effectively to unexpected situations. The cognition of the products is formed by automatically optimizing the product function across the whole product lifecycle to maximize customer satisfaction, product quality, and sustainability, while minimizing production overheads. The research area is application-oriented, with a continual demand for developing prototypes and showcases, which are primarily based on embedded systems, sensor integration, as well as data acquisition and analysis.

Job profile

We are seeking a highly motivated PhD Researcher to join the COEVOLVE project, which explores how artificial intelligence and formal methods can accelerate the development of automotive embedded systems. The role focuses on leveraging different types of AI to develop models that support automotive engineers during the development phase. This position includes two major fields: automotive embedded systems and artificial intelligence (i.e., LLMs) - experience in either of these fields and strong interest in the other is essential. Prior experience in industry or industrial projects is an advantage, as it enables the candidate to fully understand, communicate, and manage the requirements set by industry in the research projects. The candidate will also have the opportunity to pursue a PhD in collaboration with TU Graz.

Your qualifications

- Master's degree in a relevant technical field
- Experience or strong interest in embedded systems; experience in the automotive sector is an advantage
- Experience or strong interest in large language models and their application to support development processes
- Interest in deterministic approaches such as **formal methods** (e.g., model checking, theorem proving).
- Knowledge of automotive standards (e.g., ISO 26262, AUTOSAR) is advantage
- Independent and reliable way of working, and working in a team
- Strong analytical and problem-solving skills.
- Fluent in English and/or German

Our offer

- The opportunity to work in a highly qualified, international, young, and dynamic research team
- Collaboration in innovative, beyond state-of-the-art research projects
- The chance to work and learn from industrial leaders in the automotive sector
- Opportunity for personnel development in a learning and respectful environment
- Great emphasis on gender, diversity, and equal opportunities
- Flexible working hours, flat organizational structures, and fun at work
- Full-time gross salary per month EUR 3,700.00 EUR



Pro²Future GmbH aims to increase the proportion of women in the research area - we are therefore particularly looking forward to applications from qualified women!

DI Cosmina-Cristina Ratiu



I work on cognitive engineering project support, developing an approach and tool support for modeling complex and collaborative processes.

Dr. Matej Vukovic



Our results give an insight into the Key Influencing Parameters for Blast Furnace and Electric Arc Furnace Operations in the Metal Industry.

DI Dr. Ouidane Guiza



I work on privacy respect and monitoring of human intensive assembly processes and cognitive line balancing support.



Flexi-Worktime



Free Coffee!



High-end Equipment



Home-Office



Internal Trainings & Study Opportunities



Structured Onboarding



Fresh Fruits



Restaurants & Mensa



Brand New Offices



Employee Events



Public Transport



Central Location



Food Allowance

To apply for this position, please send your application (including CV, supporting documents, letter of motivation), via e-mail to: jobs@pro2future.at. Pro²Future GmbH, z.H. Mag. (FH) Sandra Neuhold-Pauer, Altenberger Straße 69, 4040 Linz, Standort Graz: Sandgasse 34, 8010 Graz, Tel.: +43 664 / 8889 2189.