



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 provinces 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 decision support we are offering the position of a

Researcher ‘DP3: Cognitive Data Analytics’

Full-time (38.5 hours/week), at Pro2Future GmbH in Graz, starting by January 2019.

Project context

The goal of this project is to improve industrial processes by means of data analytics which will be achieved by a combination of data-driven knowledge generation and corresponding redesign and reconfiguration of business processes. In order to support the decision makers (responsible for changing the business processes) it is essential to visualize process designs, running process instances, recognized defects or inefficiencies, and possible changes. Furthermore, it is critical that the decision maker is aware of potential effects of process changes. Thus, this project will deliver a simulation tool to evaluate different alternative shop floor process changes. The scientific partners in this project are the Graz University of Technology, the Johannes Kepler University Linz and the Vienna University of Technology.

In summary, this project aims towards six main goals:

1. Process redesign and reconfigurations by means of data analytics
2. Visualization of processes and process changes
3. Simulation of data & process alternatives
4. Support of cascading process changes
5. Secure data connections
6. Use case based evaluation in smart factories

Job profile

The successful candidate will contribute to developing a toolset for industrial process improvements based on data analytics. The toolset will consist of algorithms, analytic machinery and visualizations to monitor (i) human factors, (ii) the industrial processes, (iii) to support human decision making, and (v) to minimize workers’ cognitive load. As such, the offered position will focus on topics related to knowledge discovery (data analytics), computer vision and human-computer-interaction.

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



Your qualification

- A university-level degree in computer science, information systems, mechatronics, telematics, or related studies.
- As the position involves the co-development of a data analytics based prototype for process improvement in industrial settings, excellent qualifications in software engineering (conception, system design, ...), software development (C++, C#, Java, Python), and working with industrial data is desired.
- Prior experiences in the fields computer vision, sensor systems, machine learning, behavior adaptation, self-* systems, or embedded/ubiquitous computing are desirable.
- Fluent English, written and spoken. German is appreciated or the willingness to learn German is expected.

We offer

- The opportunity to align the research for your Ph.D. studies to a 3-years research project, starting in autumn 2019.
- 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.
- Full-time gross salary for this position is 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 and international candidates.

To apply for this position, please send your application (including CV, supporting documents, letter of motivation), topic: "DP3: Cognitive Data Analytics" via email to: jobs@pro2future.at

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