

## Marie Skłodowska Curie Action – Postdoctoral Fellowship 2023

### Expression of interest – Hosting offer (MSCA-PF-2023)

<b>Contact Person/Scientist in charge</b> <i>(data of the principal investigator of the research group/lab or scientific supervisor)</i>	<b>Name</b>	Jochen
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<b>Laboratory /Department /Institute /Centre /</b> <i>(data of the centre/department where the fellow would be located)</i>	<b>Name</b>	Institute of Factory Automation and Production Systems (FAPS), Friedrich-Alexander-Universität Erlangen-Nürnberg
	<b>Address</b>	Fürther Straße 246b, 90429 Nürnberg
<b>Research Area</b> <i>(Please select the research area: corresponding to the eight MSCA evaluation panels. You can select between one and up to three scientific areas per EO)</i>		Information Science and Engineering (ENG) Mathematics (MAT) Physics (PHY)
<b>Brief description of the Centre/Research Group</b> <i>(max. 1,600 characters including spaces: information about the research centre or research group, scientific staff. Please include URL if possible)</i>		Research Group Home Automation The Home Automation research group of the FAPS institute develops and investigates technologies for smart, energy- and resource-efficient living in the private sector. Scientists from various disciplines work in the group: Engineers, computer scientists, social scientists and health experts. Together, they develop concepts to ensure efficient energy supply and use and to create a self-determined, age-appropriate and individual living space. The group's research focuses on intelligent systems and devices that operate autonomously and interoperably and enable people to operate them intuitively, including using speech or gestures.
<b>Project description</b> <i>(max. 1,800 characters including spaces: short description of the research project / research line where the fellow would be hosted and develop his /her project)</i>		Energy management, infotainment, comfort and safety, and health are central points that offer data-driven development opportunities in connected everyday life. For example, the energy management of (private) households can be optimized, comfort improved and security enhanced. On the other hand, many people are critical of the disclosure and handling of their data. They fear that they will become transparent citizens vis-à-vis governments and companies. A European software architecture is intended to remedy this: Gaia-X. Within Gaia-X, personal data will be handled in accordance with European data protection guidelines. In addition, tools are to be created that can draw conclusions from the collected data with the help of artificial intelligence. This is precisely where the research of the Home Automation research group comes in: Sensor information from the field of smart living aims to be compatibly integrated and made available to various actors in a data-sovereign manner. The long-term goal is to build a Gaia-X-compliant technology stack. Specific research lines that are to be tackled in the research area of home automation are areas related to Gaia-X, IoT and energy. Within these fields, research is being devoted to cloud infrastructures, data management and software architectures.
<b>Applications: documents to be submitted and deadlines</b> <i>(Please indicate the documents that the candidate fellow should submit to establish contact: CV, letter of motivation, letter of references, etc., please indicate deadline. Recommended deadline: April 2023)</i>		<ul style="list-style-type: none"> <li>• Curriculum vitae</li> <li>• Abstract of PhD Thesis</li> <li>• Short Letter of Motivation</li> <li>• Link to projects, Github account and/or any software development</li> </ul> Deadline: June 2023

