

Application Form / Workshop Description



Please note:

There are lots of workshop proposals expected. A detailed description of your workshop proposal will make it easier for the organisers (and at a later stage the participants) to select the right workshops.

Session Title:

Robot Co-Workers in Manufacturing Environments

Organiser(s):

Dr. Andreas Pichler (andreas.pichler@profactor.at)

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PROFACTOR GmbH

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Prof. Dr.-Ing. Frank Walhoff (frank.wallhoff@jade-hs.de)

Jade Hochschule Wilhelmshaven/Oldenburg/Elsfleth

Ofener Straße 16/19

D-26121 Oldenburg

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Motivation and objective:

*This workshop is organized by the two Coordinators of the first funded FP7 PPP (Public private partnership) of the European Commission. Both projects are related to the topic industrial robots. The topic of the workshop is “Robot Co-Worker in Manufacturing Environments”, special on adaptive, self-learning and service oriented robots focused on the **newest industrial oriented topics** in Europe (FP7) proposals.*

Some subtopics that are discussed within the workshop are:

- *Robots as Co-Workers*
- *Flexible Packaging Robots*
- *Plug & Produce Robots*
- *Robotics in transformable factory*

Special new research and development in special fields all with an industrial end user perspective are addressed. The aims and the goals of the 2 funded projects as well as the first results and the newest achievements of the project consortia's on a high scientific level are foreseen. Also topics like reliable human/worker tracking and motion prediction, representation of knowledge gained by teaching and observation and fault tolerant and secure human-machine interfaces for inexperienced workers are in the focus of the workshop.

Approach:

The workshop will consists of a keynote speech from a major industrial company in the field of robot co-workers. After the keynote speech three presentations of approximately 20 minutes will be given of companies/institutes coordinating and participating in the funded research projects. The presentations will be followed by a discussion round focusing on the potential and the future of robot co-workers in industrial environments.

Agenda of the workshop:

- 14:00 – 14:05 Introduction by the moderators
- 14:05 – 14:50 Keynote speech

Application Form / Workshop Description



- 14:50 – 15:45 *Presentation by selected participants*
- 15:45 – 16:00 *Discussion*

Speaker(s):

Dr. Paolo Ferrara, CEO, FerroboticsGmbH (Keynote Speaker)

Dr. Andreas Pichler, CEO, PROFACTOR GmbH

Prof. Dr.-Ing. Frank Wallhoff, Professor for assistive technologies, Jade Hochschule

Dr. James R. Hopgood, Lecturer, The University of Edinburgh / Dr. Neil Robertson, Heriot Watt University

How can participants contribute to, and prepare for, the workshop?

Participants are asked to have a look beforehand at the website of the mentioned EU projects:

- *Locobot – www.locobot.eu*
- *CustomPacker – www.custompacker.eu*

Further information:

Locobot – Low cost robot co-workers (www.locobot.eu)

CustomPacker – Highly Customizable and Flexible Packaging Station for mid- to upper sized Electronic Consumer Goods using Industrial Robots (www.custompacker.eu)

Ferrobotics GmbH (www.ferrobotics.at)

PROFACTOR GmbH (www.profactor.at)

Planned follow-up:

We intend to collect information of potential applications and stakeholder interests.

Based on this, we want to define a strategic roadmap for an open technology platform for complex fenceless robot assistants which should spur new industrial relevant applications;

The information could be made available on the EUROP Website to raise awareness of the industrial need to come up with innovative solutions to enable transformable factories where the human is in the center and not the machine.