

# RACIR 2021

## 5th Robotix-Academy Conference for Industrial Robotics



### AGENDA

- 09:30 - 10:00: Conference reception**
- 10:00 - 10:15: Welcome**
- 10:15 - 10:40: Mohamad Bdiwi - IWU Fraunhofer**  
New possibilities through collaborative robots in the heavy-duty sector
- 10:40 - 11:05: Moritz Böker - Hochschule Heilbronn**  
An approach to overcome challenges prior to the actual peg-in-hole problem for the lithium-ion battery pack assembly
- 11:05 - 11:30: Luisa Hornung - Hochschule Karlsruhe**  
Human-Robot Collaboration: a Survey on the State of the Art focusing on Risk Assessment
- 11:30 - 12:30: Break - Exhibition and Postersession**
- 12:30 - 13:00: Guided Lab Tour**
- 13:00 - 13:25: Christopher - Schneider - Yaskawa**  
Collaborative or Industrial Robot? An Economic Calculation Scheme to Determine the Optimal Robot Technology in Fenceless Machine Tending
- 13:25 - 13:50: Alexej Simeth - Universität Luxemburg**  
Convolutional Neural Network for detection of fluid level in bores for assembly automation
- 13:50 - 14:15: Stefan Marx - ZeMA**  
A Concept for Object Detection and Localization based on AI and Computer Vision as a Basis for Bin Picking Applications
- 14:15 - 14:45: Exhibition and Postersession**
- 14:45 - 15:10: Meryem Taghbalout - Universität Lorraine**  
Robotic stripping with external position/force control applied to the Yumi collaborative robot
- 15:10 - 15:35: Menghang Liu - Universität Lorraine**  
Evaluation of the feasibility of Using camera and Aruco for position feedback on a 4 cable driven parallel robot
- 15:35 - 16:00: Amir Dahouei - Innocise GmbH**  
From nature to robotic: Synthetic micropatterned grippers
- 16:00 - 16:25: Tobias Elbert - UCB / ZeMA**  
Detection of cuts on vascular stents using convolutional neural networks
- 16:25 - 16:40: Closing Speech**
- From 16:40: DRV come around with a guided Lab Tour**



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[www.robotix.academy](http://www.robotix.academy)

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### Postersession Presentators

- Christian Konstroffer - UCB** Investigation of a concept for autonomous cleaning of  
**Lisa Kopp UCB** - solar panels with a robotic system under consideration of economic efficiency
- Allister Pereira UCB** MaRIO - A Cost-Effective Solution for  
**Kevin Fuchs UCB** - Human-Robot Interaction  
**Henrik Schu UCB**
- Florian Schäfer UCB** - Project - VIP-MRK
- Yves Windish UCB** - Project - MRK-Safe

### Exhibitors

**B&R**

**IGUS**

**YASKAWA**

