



# Mohamed Behery

Doctoral Researcher

## Education

2018 present	<b>Ph.D.</b> Computer Science Artificial Intelligence and Applied Robotics	RWTH Aachen University
2016	<b>M.Sc.</b> Software Systems Engineering <i>Grade: 1.7, Thesis grade: 1.1</i>	RWTH Aachen University
2011	<b>B.Sc.</b> Computer Science and Engineering Received a five year scholarship <i>Grade: 1.5, Thesis grade: 1.0</i>	German University in Cairo

## Experience

06.2018 present	<b>Doctoral Researcher</b> • Researcher at the Knowledge-Based Systems Group (KBSG) • Teaching courses, seminars, and labs in addition to thesis supervision • Workstream deputy lead in the excellence cluster: the Internet of Production (IoP) since 01.2022. • Coordinator of AI expert group in the IoP since 01.2022 • Member of the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE)	RWTH Aachen University, Aachen, Germany
03.2017 05.2018	<b>Robot Software Engineer</b> <i>Working as a part of the development team using Python, django, ROS, Vue.js as well as several other tools and frameworks to build tools for robot management.</i>	Magazino GmbH, Munich, Germany
07.2015 09.2016	<b>M.Sc. Thesis Student</b> Shared autonomy teleoperation of assistive robotic arms for people with tetraplegia using Python, and OpenRave	German Aerospace Center, Weßling, Germany
05.2014 05.2015	<b>Student Software Developer</b> <i>Worked on internal tools for network monitoring using Perl and CakePHP</i>	Ericsson Eurolab, Herzogenrath, Germany
02.2013 07.2013	<b>Teaching Assistant</b> <i>Introduction to computer programming Data structures and algorithms</i>	German University in Cairo, Cairo, Egypt
03.2010 08.2010	<b>B.Sc. Thesis Student &amp; Intern</b> • A testbed for Public Key Infrastructure (PKI) • Prototyping and UI design for testbed application using Java (Swing) and different UI prototyping tools	DHBW Mannheim, Mannheim, Germany

## Scholarships and Awards

<b>IoP Young Researcher Award 2022</b> Received second place for work on the next generation HRC for the IoP	September 2022
<b>International Summer School on AI and Games</b> Received scholarship for attending the summer school in Chania, Greece	August 2022

### Address

📍 Aachen, Germany

### Contact Info.

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📄 github.com/behery  
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### OpenSource

RobotWebTools

### OS Preference

GNU/Linux ★★★★★  
Windows ★★★★★

### Languages

Arabic ★★★★★  
English ★★★★★  
German ★★★☆☆

### Research Interests of Focus

Robotics  
Artificial Intelligence  
Knowledge Representation and Reasoning

### Hobbies

Scuba Diving  
(PADI Advanced OW)  
Freediving  
(SSI Level II)  
Road Cycling

## Publications

**Mohamed Behery**, Philipp Brauner, Hans Aoyang Zhou, Merih Seran Uysal, et al. "Actionable AI for the Future of Production". English. In: *Internet of Production Fundamentals, Applications and Proceedings*. In Press. Springer, 2022

**Mohamed Behery** and Gerhard Lakemeyer. "Motion Descriptors for Intention Recognition in Robot Teleoperation Tasks". In: *Workshop on Prediction and Anticipation Reasoning in Human Robot Interaction at the International Conference on Robotics and Automation (ICRA)*. Philadelphia, 2022

Ralph Baier, Hannah Dammers, Alexander Mertens, **Mohamed Behery**, et al. "A Framework for the Classification of Human-Robot Interactions within the Internet of Production". en. In: vol. 2. *Lecture Notes in Computer Science*. Cham: Springer, 2022

**Mohamed Behery**, Minh Trinh, and Gerhard Lakemeyer. "Human Action Nodes for Behavior Trees". In: *Proceedings of the Workshop Robotics for People (R4P): Perspectives on Interaction, Learning and Safety at The Robotics: Science and Systems (RSS) Conference*. 2021, pp. 13–14

Vladimir Samsonov, **Mohamed Behery**, and Gerhard Lakemeyer. "Reinforcement Learning for Short-Term Production Scheduling with Sequence-Dependent Setup Waste". English. In: *ERCIM News* 122 (July 2020), pp. 38–39. URL: <https://ercim-news.ercim.eu/>

**Mohamed Behery**, Matteo Tschesche, Fridtjof Rudolph, Gerhard Hirt, et al. "Action Discretization for Robot Arm Teleoperation in Open-Die Forging". In: *Proceedings of the SMC 2020 conference*. 2020

Aymen Gannouni, Vladimir Samsonov, **Mohamed Behery**, Tobias Meisen, et al. "Neural Combinatorial Optimization for Production Scheduling with Sequence-Dependent Setup Waste". In: *proceedings of the SMC 2020 conference*. 2020

**Mohamed Behery**. *A Knowledge-Based Activity Representation for Shared Autonomy Teleoperation of Robotic Arms*. Tech. rep. RWTH Aachen, Aug. 2016. URL: <https://elib.dlr.de/105891/>