

Peter M. Roth, Gerald Steinbauer, Friedrich Fraundorfer, Mathias Brandstötter, and Roland Perko (eds.)

**Proceedings of the
Joint Austrian Computer Vision and
Robotics Workshop 2020**

Graz University of Technology

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Gesellschaft für Mess-, Automatisierungs- und Robotertechnik (GMAR)

Editors

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Preface

The Joint Austrian Computer Vision and Robotics Workshop (OAGM and ARW Workshop) was originally planned to take place at Graz University of Technology on April 16 and 17, 2020. However, due to the COVID-19 situation in 2020, we had to do without a physical event and thus we had to cancel both the originally scheduled event in April 2020 and the re-scheduled event in September 2020. After the submission and reviewing process could be finished almost as planned, we decided to publish the proceedings anyway. In this way, many thanks to all who had made this possible (authors, reviewers, program chairs, publisher)!

The main intention of the joint workshop would have been to bring together researchers, students, professionals, and practitioners from the fields of Computer Vision and Robotics to present and actively discuss the latest research and developments. While in the past there has been a perceivable gap between these two research directions, we can recognize that there are more and more common interests, which can also be seen from contributions from both scientific communities. Overall, there have been 50 original contributions, where an international program committee selected 38 for publications based on a double-blind review process, where each paper was reviewed by three reviewers. To follow the tradition, outstanding contributions will be awarded prizes sponsored by OCG (OAGM track) and IEEE RAS (ARW track). In addition, for the very first time, there will be an IEEE Women in Engineering Award for the best contribution of a female first author (both tracks). Moreover, we would like to thank Land Steiermark (Ressort für Wirtschaft, Tourismus, Europa, Wissenschaft und Forschung) and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology for supporting the Joint Austrian Computer Vision and Robotics Workshop 2020.

Even though there is no physical event, we would also like to thank the international speakers who accepted our invitations: Frank Kirchner (DFKI Bremen), Jürgen Gall (University of Bonn), and Thomas Schmickl (KFU Graz). We would be happy to re-invite them in future either for an upcoming physical or virtual event.

In this way, we are happy to make at least the proceedings available! Stay healthy, hopefully seeing you again in 2021,

Mathias Brandstötter, Gerald Steinbauer (ARW Chairs)

Friedrich Fraundorfer, Roland Perko, Peter M. Roth (OAGM Chairs)

Graz, July 2020

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Mathias Brandstötter (JOANNEUM RESEARCH)

OAGM Workshop Chairs

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Roland Perko (JOANNEUM RESEARCH, Graz University of Technology)

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Andreas Uhl (University of Salzburg)
Martin Welk (Private University of Health Sciences, Medical Informatics and Technology)
Christopher Zach (Chalmers University of Technology)
Michael Zillich (Blue Danube Robotics)

OAGM Awards 2019

The

OCG Best Student Paper Awards 2019

were awarded to the papers

On the Use of Artificially Degraded Manuscripts for Quality Assessment of Readability Enhancement Methods

by

Simon Brenner and Robert Sablatnig.

and

Efficient Multi-Task Learning of Semantic Segmentation and Disparity Estimation

by

Robert Harb and Patrick Knöbelreiter.

The

OCG Best Poster Award 2019

was awarded to the paper

Combining Deep Learning and Variational Level Sets for Segmentation of Buildings

by

Muntaha Sakeena and Matthias Zeppelzauer.

ARW Awards 2019

The

IEEE RAS Austria Best Research Paper Award

was awarded to the paper

A Dynamical System for Governing Continuous, Sequential and Reactive Behaviors

by

Raphael Deimel.

The

Best Poster Award

sponsored by the ABB-Group was awarded to the paper

Multilingual Speech Control for ROS-driven Robots

by

Dominik Hofer, Simon Brunauer and Hannes Waclawek.

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