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Interactive Collaborative Robotics

6th International Conference, ICR 2021
St. Petersburg, Russia, September 27–30, 2021
Proceedings

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Preface

The 6th International Conference on Interactive Collaborative Robotics (ICR 2021) was organized as a satellite event of the 23rd International Conference on Speech and Computer (SPECOM 2021) by the St. Petersburg Federal Research Center of the Russian Academy of Sciences (SPC RAS, St. Petersburg, Russia) in cooperation with the Technical University of Munich (TUM, Munich, Germany).

ICR 2021 was held during September 27–30, 2021, and focused on challenges of human–robot interaction, robot control and behavior in social robotics and collaborative robotics, as well as applied robotic and cyber–physical systems.

During the conference an invited talk “Enabling Robots to Cooperate and Compete: Distributed Optimization and Game Theoretic Methods for Multiple Interacting Robots” was given by Mac Schwager (Stanford University, Stanford, USA).

Due to the ongoing COVID-19 pandemic, for the second time, SPECOM 2021 including ICR was organized as a fully virtual conference. The virtual conference, in the online format via Zoom, had a number of advantages including an increased number of participants because listeners could take part without any fees, essentially reduced registration fees for authors of the presented papers, no costs for travel and accommodation, a paperless green conference with only electronic proceedings, free access to video presentations in YouTube after the conference, comfortable home conditions for presenters, etc.

This volume contains a collection of 19 papers presented at ICR 2021, which were thoroughly reviewed by members of the Program Committee consisting of more than 20 top specialists in the conference topic areas. Theoretical and more general contributions were presented in oral sessions. Problem oriented sessions as well as discussions then brought together specialists in niche problem areas with the aim of exchanging knowledge and skills resulting from research projects of all kinds.

Last but not least, we would like to express our gratitude to the authors for providing their papers on time, to the members of the conference reviewing team and Program Committee for their careful reviews and paper selection, and to the editors and correctors for their hard work preparing this volume. Special thanks are due to the members of the Organizing Committee for their tireless effort and enthusiasm during the conference organization. We hope that you benefitted from both the SPECOM and ICR 2021 events.

September 2021

Andrey Ronzhin
Gerhard Rigoll
Roman Meshcheryakov

Organization

ICR 2021 was organized by the St. Petersburg Federal Research Center of the Russian Academy of Sciences (SPC RAS, St. Petersburg, Russia) in cooperation with the Technical University of Munich (TUM, Munich, Germany). The conference website is located at: <http://www.specom.nw.ru/icr2021/>.

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