Call for Contributions

Submission:

1. Inform the Chair: with the Title of your Contribution
2. Submission URL:
   https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICAS+2020+Special
Please select Track Preference as VLRA

Special track

VLRA: Vision and Learning for Robotic Applications

Chair and Coordinator:
Dr. Timothy Patten
Automation and Control Institute, TU Wien, Austria
patten@acin.tuwien.ac.at

Co-Chair:
Dr. Geraldo Silveira
Division of Robotics and Computer Vision, CTI, Brazil
geraldo.silveira@cti.gov.br

along with

ICAS 2020, The Sixteenth International Conference on Autonomic and Autonomous Systems
https://www.iaria.org/conferences2020/ICAS20.html
September 27 - October 01, 2020 - Lisbon, Portugal

Computer vision and learning algorithms are integral components for robotic systems. Research in these areas receives significant attention and algorithmic advances in vision, learning and their combination are widespread. However, much work is still only evaluated on datasets or in laboratory conditions. Consequently, the usability for robotic applications in the real world remains to be truly validated.

The goal of this special track is to promote development in computer vision and learning for solving real-world robotic applications. As such, the focus is on technological advances for visual sensors; data acquisition and datasets; robot vision in the wild; overcoming the challenges of deploying learning-based methods in real-world systems; interfacing vision and learning; integration for high-speed control; and methods applied to navigation, semantic understanding, manipulation, decision making and cognitive behaviour.

Topics include, but not limited to:

- Technological developments for robot vision
- Robotic datasets
- Robot and machine vision in the wild
- Object detection, recognition and tracking
- Visual learning
- High-speed control
- Application of reinforcement and deep learning in robotics
- Sim-to-real transfer
- Advanced grasping and manipulation
- Robots for service, industry, autonomous driving, transportation, agriculture and construction
Important Datelines
Submission: July 3, 2020
Notification: July 23, 2020
Registration: August 2, 2020
Camera ready: August 2, 2020

Contribution Types
- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format
- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html

Publications
- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: http://www.thinkmind.org

Paper Submission
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ICAS+2020+Special
Please select Track Preference as VLRA

Registration
- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

Contact
Chairs
Timothy Patten: patten@acin.tuwien.ac.at
Geraldo Silveira: geraldo.silveira@cti.gov.br
Logistics: steve@iaria.org