Call for Contributions

Note: Onsite and Online Options
In order to accommodate a large number of situations, we are offering the option for either physical presence or virtual participation. We would be delighted if all authors manage to attend in person, but are aware that special circumstances are best handled by having flexible options.

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**

<center>**Special track**</center>

VLRA: Vision and Learning for Robotic Applications

<center>**Chair and Coordinator:**
Dr. Timothy Patten
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<center>**Co-Chair:**
Dr. Geraldo Silveira
Division of Robotics and Computer Vision, CTI, Brazil
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<center>along with</center>

<center>**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</center>

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
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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

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