Second Call for Participation

The **IEEE RAS International Summer School on "Deep Learning for Robot Vision"** will be held on December 9-13, 2019 in Santiago & Rancagua, Chile.

This international Summer School targets students (Master / PhD level and last years of undergraduate), researchers and professionals interested in Robotics, Robot Vision, Deep Learning and related topics. The official language of the summer school is English, and it will include tutorial courses, keynote lectures, a student poster competition, and live demonstrations such as autonomous vehicles, robot soccer, domestic robots, among others.

There are **no registration fees for students** regardless of their nationality or country of affiliation, but priority will be given to students with an IEEE membership. A **travel grant program for international students** will to provide support for international students attending the summer school. We expect to have over 100 attendees to the summer school (in 2012 we hosted 85 attendees from over 15 countries). The registration and grant application procedures will be announced soon.

The Summer School is co-organized by the Advanced Mining Technology Center of the Universidad de Chile and the Institute of Engineering Sciences of the Universidad de O'Higgins, Chile. It is co-funded by the IEEE Robotics and Automation Society (RAS) Summer School Program, it is technically sponsored by the IEEE RAS Technical Committee on Robot Learning, it is sponsored by the IEEE RAS Chilean Chapter. This Summer School follows the successful IEEE RAS Summer School on "Robot Vision and Applications" organized in Chile in 2012.

The Summer School will provide a clear overview of Deep Learning methods in Robotics with a particular emphasis in robot vision, while also providing an in-depth analysis of state-of-the-art research in this area. We will have introductory lectures and short advance courses in the following topics: deep learning for robot vision, deep reinforcement learning, deep learning for robot vision under time & hardware constraints, deep learning for 3D reconstruction & SLAM, deep & model-based learning, deep learning for manipulation & grasping, etc.

IEEE RAS International Summer School on "Deep Learning for Robot Vision"

December 2019, Chile

In addition to the tutorial courses and keynote lectures, we will have:

- A student poster contest on robotics
- Demo sessions where various robots will be displayed and introduced.
- A hands-on course on deep learning methods using a last-generation high-performance computing platform (GPU cluster NVIDIA DGX-1). This course is limited to 10 attendees which will be selected based on a project proposal. The application guidelines will be announced soon.
- Finally, a focused discussion session with some of the lectures of the Summer School. This session is limited to 10 participants. Interested participants need to submit a topic or paper of their interest to be discussed during the session. The application guidelines will be announced soon.

The Summer School will have presentations by renowned international speakers, including:

- Nicholas Roy, Robust Robotics Group, CSAIL, MIT
- Niko Sünderhauf, Australian Centre for Robotic Vision and Queensland University of Technology (QUT) in Brisbane
- Jens Kober, Cognitive Robotics department, Delft University of Technology (TU Delft)
- Juxi Leitner, Australian Centre of Excellence for Robotic Vision
- Stefan Leutenegger, Imperial College London

A detailed program will be made available at the Summer school website http://robotvision2019.amtc.cl

If you want to be notified about important information regarding the summer school such as when the program is made available, the registration process opens, please fill your contact information in the following form: https://goo.gl/forms/jKeAsqnLuFwZKWx83

Javier Ruiz-del-Solar, Universidad de Chile, Chile
Rodrigo Verschae, Universidad de O'Higgins, Chile
General Chairs
IEEE RAS International Summer School on "Deep Learning for Robot Vision"