



World Robotic Sailing Championship & International Robotic Sailing Conference 2015, Mariehamn, Åland Islands

Åland University of Applied Sciences is organizing World Robotic Sailing Championship and International Robotic Sailing Conference 2015 in Mariehamn. The conference takes place on August 31 and the sailing competitions on September 1-4.

An increasing number of research teams around the world try to teach their boats the complex task of sailing. The best routing decision, perfect handling of ever changing wind conditions and perfect timing during tack and jibe are some of the skills an autonomous sailing vessel has to master.

A robotic sailboat is able to autonomously navigate towards any given target without human control or intervention. The optimal route is calculated dependent on strategic goals and weather parameters. Rudder and sails are autonomously controlled in order to keep course and to execute manoeuvres like tack and jibe. As sailboats operate in a highly dynamic, environment an autonomous sailboat has to respond quickly to ever-changing environmental conditions. Incoming data from sensors (GPS, compass, anemometer, etc.) have to be analyzed by intelligent control mechanisms.

World Robotic Sailing Championship

World's best autonomous sailing boats compete every year in order to win the world championship in robotic sailing. This year's championship takes place in the Maritime Quarter of Mariehamn.

This year's challenges include Station keeping, where the boats shall remain in a limited area for a predetermined time. Another contest requires the boats to scan an area and provide marine measurements from the area sections. The remaining two challenges are a triangular course race and a fleet race, where the goal is to be the fastest boat from start to finish.

Six teams have registered for the competitions of 2015. The teams are from France, Russia, Wales, Switzerland, Norway and Åland Islands. Boats vary in size from 1 meter (micro-sailboat category) to 4 meters. This year one team is also competing with an autonomous kite sailing platform.

Teams will present their boats and answer questions at the Exhibition on September 1st 15-18. The championship ends with a fleet race on September 4th at 10.

International Robotic Sailing Conference

International Robotic Sailing Conference gives researchers an opportunity to present their work on and discuss the broad range of scientific problems involved in the design and development of autonomous sailboats. IRSC proceedings present the cutting edge of work in a variety of fields related to robotic sailing.



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Twelve papers are being presented at the conference from researchers all over the world, including USA, Japan, China and many parts of Europe. The conference contains three sessions:

- *Mission planning, collision avoidance and localization*
- *Sailboat platforms and applications*
- *Controllers and sensors*

The conference is held at Åland's Hotel and Restaurant School, August 31, 9-17.30.

You can find more information here

www.wrsc2015.com

<https://www.facebook.com/pages/World-Robotic-Sailing-Championship/456602987835710>

Best regards,

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