robotics
Swiss National Centre of Competence in Research

COMMUNITY NEWSLETTER
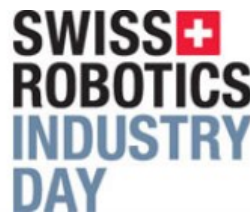
SWISS ROBOTICS INDUSTRY DAY

The Swiss Robotics Industry Day took place on 2 Nov 2016 at the SwissTech Convention Center in Lausanne. The event brought together all NCCR Robotics labs, 22 Swiss SMEs and start-ups in robotics, and about 100 guests from 60 companies upon invitation. Some 250 participants attended nine talks, 70 posters and technology demonstrations, and the 22 company booths. This second edition of the Robotics Industry Day marked a significant participation increment from last year. Industry members described the event as "inspiring", "useful", "valuable", and "enjoyable". We want to thank all the participants, speakers and exhibitors and we are looking forward to welcoming you again for the third edition on 2 Nov 2017!

SWISS✚ROBOTICS INDUSTRY DAY

David Atienza, head of Tech Transfer and Dario Floreano, Director

SWISS ROBOTICS INDUSTRY DAY PRESS COVERAGE

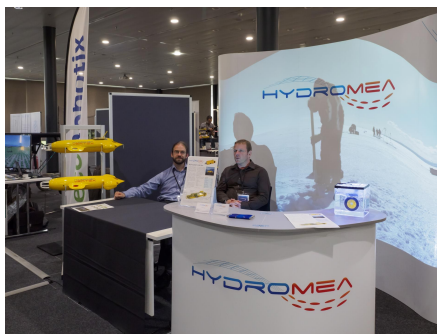LE TEMPS | 24 heures | 24 heures

Robohub | PLAY RTS | Le Nouvelliste

SWISS ROBOTICS INDUSTRY DAY IN PHOTOS

In this issue...

Swiss Robotics Industry Day

News: Release of Event-Camera Dataset

Open positions: PhD and Postdoc openings at Scaramuzza lab

Congratulations: 2016 Best Paper Awards

Publications

ROBOTICS WORLD

Top News

Students develop cheap 3D printing technique for soft robotics

Driverless-vehicle options now include scooters

Digital farms are already a reality

NAO Next Gen now available for a wider audience

What is good robot design?

World events

Next-Generation Robotics & Automation: Automotive Manufacturing Europe 2016 (29-30 Nov)

Frontiers (5-6 Dec)

RoboUniverse San Diego (14-15 Dec)

RAHA2016 (18-20 Dec)

External calls

JARES 2016

IEEE International Conference on Networking, Sensing and Control

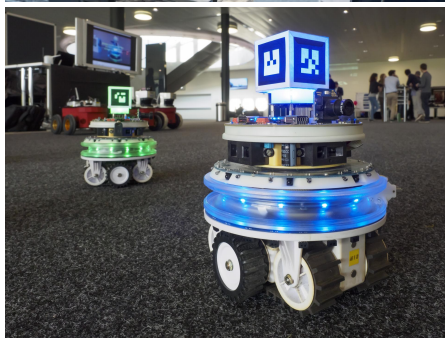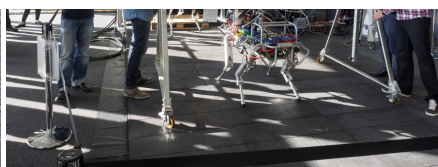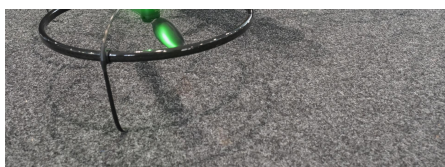### External positions

Computer Science and Engineering (University of South Florida)

Staff Electrical Engineer - Robotics (Harvard Medical School)

Interesting links

Une nouvelle régulation pour les drones entrera en vigueur en 2017

📢 NCCR ROBOTICS NEWS

Release of Event-Camera Dataset

Release of the first public collection of datasets recorded with an event camera (DAVIS) for pose estimation, visual odometry and SLAM applications. Read more.

📢 OPEN NCCR ROBOTICS POSITIONS

PhD and Postdoc openings in Deep Learning, Control, and Robot Vision for Agile, Vision-based Quadrotor Flight

Several PhD student and Postdoc opportunities are now available, working with Prof. Scaramuzza... Read more

ROBOTICS &
PERCEPTION
GROUP

📢 CONGRATULATIONS

NCCR Robotics Best Postdoc Paper

The Y6 NCCR Robotics Best Postdoc Paper was awarded to Marco Capogrosso for his paper *Mechanisms Underlying the Neuromodulation of Spinal Circuits for Correcting Gait and Balance Deficits after Spinal Cord Injury*. DOI: 10.1016/j.neuron.2016.01.009

NCCR Robotics Best PhD Paper

The Y6 NCCR Robotics PhD Best Paper was awarded to Jun Shintake for his paper *Versatile soft grippers with intrinsic electroadhesion based on mulifunctional polymer actuators* DOI: 10.1002/adma.201504264

NCCR Robotics Best PhD Paper - Special Mention

A special mention was given to Michael Neunert for his paper Fast nonliner Model Predictive Control for Unified Trajectory Optimization and Tracking DOI: 10.1109/ICRA.2016.7487274

📖 SELECTED NCCR PUBLICATIONS *

J. Shintake, H. Shea and D. Floreano, "Biomimetic Underwater Robots Based on Dielectric Elastomer Actuators," In *IEEE/RSJ International Conference on Intelligent Robots and Systems, Daejeon, Korea,* October 9-14.

Z. Zhakypov, J. L. Huang and J. Paik, "A Novel Torsional Shape Memory Alloy Actuator: Modeling, Characterization, and Control," in *IEEE Robotics & Automation Magazine*, vol. 23, no. 3, pp. 65-74, Sept. 2016.

*Selected publications include publications which have been made known to the editor . All members are kindly encouraged to inform the management team of new pulbications.

NCCR Robotics

The Swiss National Center of Competence in Robotics (NCCR Robotics) is a federally funded programme bringing together robotics laboratories from EPFL, ETH Zurich, University of Zurich and University of Lugano to work on wearable, rescue and educational robots.