# Issue 23 December 2015 Public Version

# COMMUNITY NEWSLETTER



The NCCR Robotics Newsletter will be back mid February 2016



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# **KTT Committee**

We are pleased to announce David Atienza as chair the NCCR Robotics KTT Committee from 01st of December 2015. We also take this opportunity to thank Tobi Delbruck for his valuable input as previous chair of the committee.



#### Marco Hutter

We welcome Marco Hutter as an NCCR Robotics Pl. Marco will continue to contribute to the RR-GC. He will be heading the Robotic Systems Lab (RSL, ETH Zurich). Dario Bellicoso and Jemin Hwangbo will be working with him as part of this team.



# NCCR Robotics Outreach event -R2T2

More than 100 children from Switzerland, Austria, France, Italy, Russia and South Africa were online last month during the Swiss Robotics Industry Day to rescue a « Mars station ». Read more



# RPG (ETH Zurich) Education & **Outreach Activities**

RPG (ETH Zurich) have recently organised a number of educational activities aimed at children of school age and students. A summary of the events is presented on our website. Read more



# BioRob (EPFL) at Bay Area Science **Festival**

On the invitation of Swissnex San Francisco, a team from BioRob (EPFL) and NCCR Robotics headed out to San Francisco this Autumn to participate in the Bay Area Science Festival Read more



#### **ROBOTICS WORLD**

#### **Top News**

Tabletop telepresence finding its

What's new in robotics this week? Bosch unveils agricultural robot

Robots Podcast #197: Multi-agent systems and human-swarm interaction, with Magnus Egerstedt

Holiday gift ideas for RoboGeeks

How many axes does my robot need?

#### World events

**Techfest International Summit** (26-27 Dec)

Techno-Management Symposium of IIT Kharagpur (21-24 Jan)

IFAM (27-29 Jan)

Global Robot Expo (28-31 Jan)

The Unmanned Systems Expo

(2-4 Feb)

QUARK 2016 (5-7 Feb)

LIFT (10-12 Feb)

WearRAcon16 (10-12 Feb)

Tech innov (11 Feb)

#### External calls

International Bionic Award euRobotics Forum 2016 (exhibitors & sponsors)

ABB - grants of \$300,000 for projects in robotics

Early Postdoc. Mobility Fellowships (SNSF)

Business Concept (Register for the training)

#### **External positions**

Multiple tenure-track/tenured faculty members in the area of robotics (Arizona State University)

Research Group Leader (Max Planck Institute for Intelligent Systems)

Open Tenure-track Faculty Positions (UCSB Mechanical Engineering)

Post-Doc Position Robust & Optimal Control for In situ Digital Fabrication (ADRL, ETH Zurich)

Assistant/Associate/Full



# **Flyability**

Flyability has closed a second investment round to increase the funding from their previous first investment round to 2.5m CHF. Read more





**WE WILL BE AT:** 

#### Global Robot Expo

28-31 January 2016

Madrid

Read more





# START UPS INSIDE SWISS ROBOTICS

#### **Swiss Robotics**

Swiss Robotics is an expanding and successful NCCR Robotics initiative that provides Swiss Start Ups with a unique opportunity to co-exhibit with NCCR Robotics at selected conferences and trade fairs. Discover some of these Start Ups:



# MagnebotiX

MagnebotiX develops and produces magnetic manipulation systems for the precise control of magnetic microagents. Their patented products drive research in nanorobotics and biology, and find applications in handling delicate tasks at the micro scale. Read more





# **III** NCCR PRESS COVERAGE

# **R2T2 Press Coverage:**

Team Nancy, France, in "L'Est Républicain" Team Fribourg, Suisse, in La Liberté Team Sion on canal9 Mars Station EPFL in Le Matin R2T2 on Oxford Virtual

Team Russia in the newspaper of Korolev

Team Russia on TV of Korolev

Team geneva on Le Temps

Team South Africa in aBr Magazine

The event on Flash, the internal newspaper of EPFL (p.25)

More press coverage available through NCCR Robotics website



# NEW VIDEOS

#### Careers in Robotics - Wafa Johal



## A new versatile gripper



#### R2T2



## Cybathlon 2016 trailer



Professor (Oregon State University)

#### Interesting link

Spot Is Boston Dynamics' Nimble New Quadruped Robot

#### Useful links

Kickstarter.com

#### **NCCR Robotics Director**

Prof. Dario Floreano

#### **CONTACT**

#### **NCCR Robotics**

Office ELG 231, Station 11 EPFL CH-1015 Lausanne Switzerland +41 21 693 69 39

nccr-robotics@epfl.ch nccr-robotics.ch

#### **IMPRESSUM**

#### Publisher

NCCR Robotics Management Team

Editor

Mavra Lirot

**Contributing Editor** 

Linda Seward / Anne-Christine Butty

Web Editing

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Cybathlon 2016 - Exoskeleton trailer



Cybathlon 2016 - Powered Arm



Cybathlon 2016 - Wheelchair

**Prosthesis Race Trailer** 



# GUESS WHO?

Can you guess who this NCCR professor is?

When he was a baby, he was fascinated by a mechanical bird in a cage that his grandfather would play for him. Read more





#### NEW MEMBERS

# Boris Gromov (IDSIA)

Boris is a PhD student at IDSIA. Previously he worked as a research engineer in the area of haptics and teleoperation at Korea Tech's BioRobotics Lab. His current research focuses on multimodal human-robot / human-swarm interaction and its applications in search and rescue scenarios.



#### Francois Francezon (IDSIA)

Francois is a PhD student at IDSIA, studying rescue collaboration and coordination in search and rescue environments. His research focuses on the formation and interactions of coallitions between humans and robots.



# Dario Bellicoso (RSL)

Dario is a PhD student at ETH Zurich and studies control algorithms for multibody systems. His research focuses on planning and control of a quadrupedal robot in challenging environment.





#### **SELECTED NCCR PUBLICATIONS \***

J. Omedes, I. Iturrate, R. Chavarriaga and L. Montesano, "Asynchronous Decoding of Error Potentials During the Monitoring of a Reaching Task" In 2015 IEEE International Conference on Systems, Man, and Cybernetics (SMC2015), Hong-Kong, October 9-12, 2015.

\*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**

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.









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