COMMUNITY NEWSLETTER

Issue 25 March 2016 Public Version

NCCR ROBOTICS NEWS W II in D







Cybathlon Tickets are now available. Secure your place at Cybathlon (Zurich, 8th October 2016) and experience a world premiere where people with physical disabilities compete using the newest technical assistance systems in six challenging disciplines.





CONGRATULATIONS

Auke Ijspeert made Full Professor

Prof. Auke lispeert (BioRob, EPFL) has been appointed Full Professor of Bioengineering in the School of Engineering (STI) at EPFL. His research develops animal robots and uses these robots to study living animals. Read more.



HRI2016 Chairs Awards winner

S. Lemaignan, F. Garcia, A. Jacq and P. Dillenbourg (CHILI, EPFL) have been granted "Best Paper Theory and Methods in HRI" for Lemaignan et al., 2016.



Michael Tucker (RELab, ETH Zurich)

Michael's PhD defence, "Development of a Tool and a Method for Estimating Knee Impedance during Gait" took place on 14th March. He will continue his research at RELab while seeking opportunities in the wearable robot design and development field.





CALLS

Cybathlon Symposium: Call for abstracts

Call for abstracts for the Cybathlon Scientific Symposium (Zurich, 6th October, two days before the main Cybathlon event). Deadline: April 30th 2016. Read more



SMC - Workshop in Brain-Machine

Interfaces

Papers are now being accepted for this workshop, theme: "New Research Opportunities and Industrial Applications in BMI Systems Arising from the IEEE Brain Initiative" Deadline: 15th April 2016. Read more



SMC 2016

IEEE INTERNATIONAL CONFERENCE ON SYSTEMS, MAN, AND CYBERNETICS BUDAPEST, OCTOBER 9-12



WE WILL BE AT:

ERF 2016

21-23 March 2016

Ljubljana, Slovenija

Read more



In this issue also...

Cybathlon Tickets

Prof. Auke Ijspeert made Full Professor

HRI Chair Award (CHILI -EPFL)

Michael Tucker' PhD thesis defence

Cybathlon Symposium Call for Abstracts

SMC Workshop in Brain-Machine Interfaces Call

We will be at ERF, Cambridge Science Festival, Hannover Messe, Automatica

Guess Who

Meet The People from LIS (EPFL)

Top News

European Robotics: Creating new markets for SMEs

American law needs a reboot when it comes to robots

NAO Next Gen now available for a wider audience

Google DeepMind challenge match: Lee Sedol vs AlphaGo

Interview: The team behind the apple harvesting robot

World events

Cognizance 18-20 March

European Robotics Forum 21-23 March

We Robot 1-2 April

SR Sprint Robotics 4-5 April

IEEE Haptics Symposium 8-11 April

Drone Dealer Expo - 11-13 April

The internet of things 12 April

Cambridge Science Festival 15-24 April

Hannover Messe 25-29 April

Soft Robotics Week 25 - 30 April

External calls

AAAS 2017 Boston Annual Meeting

Soft Robotics Competitions

Abstract Award Competition at Forum

ISER

ICIA

ICSR

Workshop in Neurorobotics

Cambridge Science **Festival**

15 - 24 April 2016

Cambridge MA and New England

Read more

Hannover Messe

25-29 April 2016

Germany

Read more

AUTOMATICA

21 - 24 June 2016

Germany

Read more







Interesting link

External positions

Chief Technology Officer - Sky-

Post-Doc in Bioinspired Soft

Post Doc in Bioinspired Soft

Post Doc in Soft Sensing and

Actuation Solutions for Wearable

Robotic Technologies - IIT

ScienceGeist

Systems - IIT

Watch

Robotics - IIT

NCCR Robotics Director

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IMPRESSUM

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NCCR PRESS COVERAGE

Amputee Feels Texture with a Bionic **Fingertip**

Wide international media coverage followed NCCR Robotics News Bulletin sent earlier in March including BBC, RTS and New Scientist amongst others.



More press coverage available through NCCR Robotics website



NEW VIDEOS

Introducing ANYmal



Cybathlon Tickets now available



GUESS WHO?

Can you guess who this NCCR professor is?

This professor used to watch the sky at night looking for UFOs with his father and built physics experiments in his wardrobe which he transformed into a laboratory. He was also very passionate about sports, particularly rock climbing... Read more



NEW MEMBERS

Ping-Keng Jao (CNBI, EPFL)

Ping-Keng Jao is a PhD student at EPFL and is studying EEG signal processing. His research focuses on identifying changes in cognitive state of a user to improve their interaction with robots.





Laboratory of Intelligent Systems (LIS) EPFL

The Laboratory of Intelligent Systems at EPFL is headed by Dario Floreano, it merges biology and engineering to design future robotics systems and better understand nature. Read more



Alexandre Cherpillod (LIS, EPFL)

Alexandre is a PhD student at the Swiss Federal Institute of Technology (EPFL) studying adaptive human drone interfaces.



Przemyslaw Kornatowski (LIS, EPFL)

Przemyslaw graduated from Warsaw University of Technology in Poland. He is currently a PhD student in LIS and his research is focused on safe foldable drones for transportation.



Stefano Mintchev (LIS, EPFL)

Stefano received his PhD in Robotics from The BioRobotics Institute in 2014. He is currently working at LIS. His research focuses on the development of bioinspired strategies for robots with multi-modal locomotion capabilities.



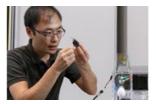
Carine Rognon (LIS, EPFL)

Carine is a PhD student and is working on wearable drone interface. She received her Bachelor degree in Microengineering from the EPFL and her Master degree in Biomedical Engineering from ETH Zurich.



Jun Shintake (LIS, EPFL)

Jun received a PhD in Microsystems and Microelectronics from EPFL in 2016. His research interests include soft robotics and smart materials.



SELECTED NCCR PUBLICATIONS *

A. Giusti, J. Guzzi, D.C. Ciresan, F. He, J.P. Rodríguez, F. Fontana, M. Faessler, C. Forster, J. Schmidhuber, G. Di Caro, D. Scaramuzza and L.M. Gambardella "A Machine Learning Approach to Visual Perception of Forest Trails for Mobile Robots," IEEE Robotics and Automation Letters, vol. 1, no., 2, pp. 661-667.

L. Hostettler, A. Özgür, S. Lemaignan, P. Dillenbourg and F.Mondada, "Real-Time High-Accuracy 2D Localization with Structured Patterns", In *IEEE International Conference on Robotics and Automation* (ICRA), Stockholm, 2016.

S. Isler, R. Sabzevari, J. Delmerico and D.Scaramuzza, "An Information Gain Formulation for Active Volumetric 3D Reconstruction", In *IEEE International Conference on Robotics and Automation* (ICRA), Stockholm, 2016.

A. Jacq, S. Lemaignan, F. Garcia, P. Dillenbourg and A.Paiva, "Building Successful Long Child-Robot Interactions in a Learning Context" In *Proceedings of the 2016 ACM/IEEE Human-Robot Interaction Conference*, 2016.

S.Lemaignan, F. Garcia, A. Jacq and P. Dillenbourg "From Real-time Attention Assessment to "With-me-ness" in Human-Robot Interaction" Proceedings of the 2016 ACM/IEEE Human-Robot Interaction Conference. 2016.

C.J. Nycz, T. Bützer, O. Lambercy, J. Arata, G. S. Fischer, and R.Gassert, "Design and Characterization of a Lightweight and Fully Portable Remote Actuation System for Use with a Hand Exoskeleton", *IEEE Robotics and Automation Letters*. Preprint Version. Accepted January, 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 publications.

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.









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