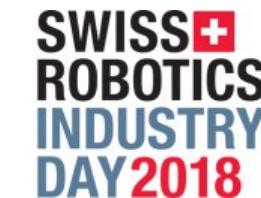


**Registration now open!**

Taking place on the 1st of November, the [Swiss Robotics Industry Day](#) is an exclusive event designed for industry professionals to experience and gain insight of the Swiss Robotics ecosystem. [Registration is now open](#)

**Integrative demo video: over 160,000 views in 4 months!**

Our [Integrative Demo of Aerial and Terrestrial Robots for Rescue Missions](#) video, posted only 4 months ago, has already registered over 160,000 views!

**How ANYmal got into The X-Files**

ANYmal, developed by an NCCR Robotics lab, recently appeared in the television series *The X-Files*. Peter Fankhauser shares on the experience about being approached, preparation of the scene and coordination with actors. [Read more](#)

**CONGRATULATIONS****Inventions Geneva - Awards**

The PackDrone received three awards during the [International Exhibition of Inventions Geneva](#): Audience Award; Special Award of the President of the Patent Office of the Republic of Poland; Award of the President of the Association of Portuguese Inventors.

**Georges Giralt PhD Award**

Christian Forster, the first PhD student to graduate from [Scaramuzza lab](#), ranked second in the 2017 George Giralt European PhD Thesis Award... [Read more](#)

**GENIUS NY round II grand prize**

NCCR Robotics spin-off [Fotokite](#) was awarded the GENIUS NY round II grand prize. The initiative is one of the world's largest business competitions focused on unmanned systems. [Read more](#)

**Top 10 innovation and personality criteria**

NCCR Robotics spin-off [MyoSwiss](#), has been selected amongst the top 10, from 220 submitted projects, for the W.A. de Vigier's innovation and personality criteria. [Read more](#)

**Best Demo Award**

NCCR Robotics spin-off [Foldaway](#) won the Best Demo Award for "Touch" VR joystick, presented for the first time at the 2018 IEEE Haptics Symposium. [Read more](#)

**In this issue...**

Registration now open!

Integrative demo video: over 160,000 views in 4 months!

How ANYmal got into The X-Files

Congratulations: PackDrone, Christian Forster, Fotokite, MyoSwiss, Foldaway

Calls: CoRL call for papers, SNSF BRIDGE-Proof of Concept

Open Positions: Marchal-Crespo lab, Floreano lab, Hutter lab, Anybotics

We will be at...

Press coverage

New videos

Selected Publications

ROBOTICS WORLD**Top News**

[Robots in Depth with David Johan](#)

[Drones as first responders](#)

[Robotic gaits to save energy](#)

[Westworld season 2](#)

[Towards a virtual stuntman](#)

World events

[C-AR 2018](#) (14-15 May)

[ICRA](#) (21-25 May)

[European NeuroConvention](#) (6-7 June)

External calls

[Future Technologies Conference - FTC](#) (Paper submission deadline: 25 April)

[International Symposium on Aerial Robotics](#) (Paper submission deadline: 01 May)

[IEEE International Conference on Intelligent Transportation Systems](#) (Regular & Workshops Papers submission deadline: 01 May)

[Swisscom StartUp Challenge 2018](#) (Submission deadline 21 May)

Equal Opportunities corner

[Second LERU Gender Conference](#)

[Gender Inequality in the Workplace and Academia](#)

CoRL call for Papers

Aude Billard is General Chair of the Organizing Committee of the 2018 Conference on Robot Learning. CoRL focuses on the intersection of robotics and machine learning. Paper [submission deadline 15th June.](#)



BRIDGE- Proof of Concept

Young researchers who want to apply their research results and realize an innovative product or service can submit their project proposal. [Submission deadline 4th June.](#)



NCCR ROBOTICS OPEN POSITIONS

Marchal-Crespo lab - PhD Position

[Marchal-Crespo lab](#), ARTORG Center for Biomedical Engineering Research (Bern) has an open PhD position in Motor Learning and Robotic Neurorehabilitation. [Read more](#)



Floreano lab - Postdoc position

[Floreano lab](#) (EPFL) invites applications for a postdoctoral fellowship in aerial robotics. The laboratory has made pioneering contributions to perception, control, and design of award-winning drones that resulted in... [Read more](#)



Hutter lab - Multiple positions

[Hutter lab](#) (ETH Zurich) has various open positions for Postdocs, PhD students and Software and Electronic Engineers. [Read more](#)



Open positions at NCCR Robotics

Spin-off, Anybotics

Multiple open positions at [Anybotics](#): Software Engineer - Robot Navigation, Software Engineer BS/MS, Electrical Engineer BS/MS and Mechanical Design Engineer BS/Ms. [Read more](#)



2018 EVENT UPDATE - WE WILL BE AT:

Hannover Messe

23-27 April 2018

Germany

[Read more](#)

HANNOVER MESSE 2018



Conference on Collective Behavior

07-11 May 2018

Italy

[Read more](#)

ICRA

21-25 May 2018

Australia

[Read more](#)



PRESS COVERAGE

Start-up corner

Please find following links related to start-up support. If you would like to promote your events through our channel, please contact us at nccr-robotics@epfl.ch

Venturelab - Scale-up Bootcamp

Fotokite share the Venture Leaders Technology 2018 experience

Swisscom StartUp Challenge 2018 (Submission deadline 21 May)

External positions

University Professor in the field of "Intelligent Systems" (EECS faculty, TU Berlin)

Research Studentship in AI for Multi Robot Systems (University of Oxford)

Fellow position in Legged Robot Design - Humanoid and Human-Centred Mechatronics Research Line (IIT)

Lecturer in Artificial Intelligence (University of Liverpool)

R&D Scientist - Robot Applications & Intelligent Robotics (ABB)

Lecturer to develop and lecture a Module in "smart robotics" (de) (Swiss Distance University of Applied Sciences)

NCCR Robotics Director

Prof. Dario Floreano

CONTACT

NCCR Robotics

Office MED 1 1526, Station 9
EPFL CH-1015 Lausanne
Switzerland

+41 21 693 26 67

nccr-robotics@epfl.ch

nccr-robotics.ch

For Technology Transfer enquiries please contact:

Jan Kerschgens

IMPRINTUM

Publisher

NCCR Robotics Management Team

Editor

Mayra Lirot

Contributing Editors

Jan Kerschgens / Joëlle Mottier

Web Editing

Mayra Lirot

Design

Alternative Communication SA / Pascal Briod

We recommend you to

Nouvel espoir pour les paraplégiques

Des chercheurs de l'Ecole polytechnique fédérale de Lausanne (EPFL) ont étudié des rats... [Read more](#) or [English translation](#)



keep up to date with:

CYBATHLON



DRONE DAYS



"Recâbler" le cerveau pour lutter contre la paraplégie

Une thérapie testée au CHUV a permis à des rats paraplégiques de retrouver l'usage de leurs pattes. [Read more](#) or [English translation](#)



Neuroprosthetic rehab allows paralysed rats to walk again

Scientists at Switzerland's EPFL are continuing their efforts to one day reverse paraplegia in humans by making rats with spinal... [Read more](#)



Dépasser la paralysie grâce au "recablage" du système nerveux

Que se passe-t-il dans le cerveau de rats paralysés qui récupèrent leur capacité à marcher?... [Read more](#) or [English translation](#)



Rats paraplégiques à l'EPFL: zone cérébrale clé identifiée

Des scientifiques de l'EPFL ont identifié une zone cérébrale clé pour le rétablissement de rats... [Read more](#) or [English translation](#)



Comment une rééducation multimodale refait marcher des rats paraplégiques

Des rats ayant une lésion spinale qui arrivent de nouveau... [Read more](#) or [English translation](#)



Rats paraplégiques: L'EPFL fait une avancée

Des chercheurs de l'EPFL ont fait un pas de plus vers la réhabilitation de patients.... [Read more](#) or [English translation](#)



More [press coverage](#) available through NCCR Robotics website

NEW VIDEOS

Landing a Drone with Pointing Gestures



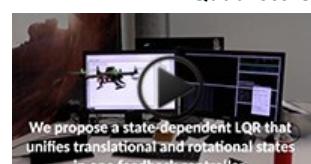
Paraplegic rats walk again after therapy, now we know why



Perception-aware Receding Horizon Navigation for MAVs



Onboard State Dependent LQR for Agile Quadrotors



A Unifying Contrast Maximization Framework for Event Cameras

Event-based Vision meets Deep Learning on Steering Prediction for Self-driving Cars



SELECTED NCCR ROBOTICS PUBLICATIONS *

T. Cieslewski, S. Choudhary, D. Scaramuzza, "*Data-Efficient Decentralized Visual SLAM*" IEEE International Conference on Robotics and Automation (ICRA), 2018.

R. O. Chavez-Garcia, J. Guzzi, L. M. Gambardella, A. Giusti, "*Learning Ground Traversability From Simulations*" IEEE Robotics and Automation Letters, 2018.

T. Corbet, I. Iturrate, M. E. A. Pereira, S. Perdikis, J. del R. Millán, "*Sensory threshold neuromuscular electrical stimulation fosters motor imagery performance*" Neuroimage, 2018.

P. Foehn, D. Scaramuzza, "*Onboard State Dependent LQR for Agile Quadrotors*" IEEE International Conference on Robotics and Automation (ICRA), 2018.

G. Gallego, H. Rebecq, D. Scaramuzza, "*A Unifying Contrast Maximization Framework for Event Cameras, with Applications to Motion, Depth and Optical Flow Estimation*" IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

A. Guneysu Ozgur, M. J. Wessel, W. Johal, K. Sharma, A. Özgür, P. Vuadens, F. Mondada, F. C. Hummel, P. Dillenbourg, "*Iterative Design of an Upper Limb Rehabilitation Game with Tangible Robots*" ACM/IEEE International Conference on Human-Robot Interaction, 2018.

A.I. Maqueda, A. Loquercio, G. Gallego, N. Garcia, D. Scaramuzza, "*Event-based Vision meets Deep Learning on Steering Prediction for Self-driving Cars*" IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

C. Rognon, A. Wu, S. Mintchev, A. Ijspeert, D. Floreano, "*Haptic Guidance with a Soft Exoskeleton Reduces Error in Drone Teleoperation*" Eurohaptics, 2018.

S. O.Schrade, K. Dätwyler, M. Stücheli, K. Studer, D. A. Türk, M. Meboldt, R. Gassert, O. Lambery, "*Development of VariLeg, an exoskeleton with variable stiffness actuation: first results and user evaluation from the CYBATHLON 2016*" Journal of NeuroEngineering and Rehabilitation, 2018.

B. Shin, Y. Kim, J. Paik, K. Lee, "*Miniaturized Twin-legged Robot with an Electromagnetic Oscillatory Actuator*" Journal of Bionic Engineering, 2018.

A. W. Winkler, D. C. Bellicoso, M. Hutter, J. Buchli, "*Gait and Trajectory Optimization for Legged Systems Through Phase-Based End-Effector Parameterization*" IEEE Robotics and Automation Letters, 2018.

Z. Zhang, D. Scaramuzza, "*Perception-aware Receding Horizon Navigation for MAVs*" IEEE International Conference on Robotics and Automation (ICRA), 2018.

F. Zuliani, C. Liu, J. Paik, S. M.Felton, "*Minimally Actuated Transformation of Origami Machines*" IEEE Robotics and Automation Letters, 2018.

*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.

Leading House



Co-leading House



© 2018 NCCR Robotics all rights reserved for NCCR Robotics texts. Images: ANYmal appears on The X-Files (Season 11, Episode 7, aired on February 28th, 2018) alongside David Duchovny and Gillian Anderson. ©2018 Fox Broadcasting Co. Cr: Shane Harvey/FOX