

COMMUNITY NEWSLETTER

LATEST NCCR NEWS

Control of trunk posture to improve gait rehabilitation

Recently featured in "Scientific Reports", a rehabilitation robotic system that controls trunk posture in closed-loop improves locomotor performance during gait...[Read more](#)



NEW: EPFL Master's in Robotics

We are glad to announce that EPFL has opened a 2-year [Master's in Robotics](#). The program provides well-rounded education and practical experience. Enrolment is now opened, application deadline: 15th of April 2018.



Communication Officer

We are pleased to announce that [Joëlle Mottier](#) has been appointed as the new the NCCR Robotics Communication Officer.



NEW Equal Opportunities Committee

The new NCCR Robotics [Equal Opportunities Committee](#) will be strongly committed to fostering and promoting equal opportunities and developing a series of effective new strategies.



CONGRATULATIONS

New Director of the Center for Neuroprosthetics

Stéphanie Lacour, Bertarelli Foundation Chair in Neuroprosthetic Technology, to succeed Olaf Blanke as Director of the Center for Neuroprosthetics. [Read more](#)



PhD Public Defense

Péter Fankhauser ([Siegwart Lab](#) & [Hutter Lab](#)) defended his thesis "Perceptive Locomotion for Legged Robots in Rough Terrain" ([video link](#)) on January 17th. He will start a full-time position at NCCR Robotics spin-off [ANYbotics](#)



PhD Public Defense

Ayberk Özgür's ([Dillenbourg lab](#)) public defense entitled "Cellulo: Tangible Haptic Swarm Robots for Learning" took place on 26th January at EPFL. Ayberk is planning to start a company based on the work from his PhD.



Internships and Fellowships

We are pleased to announce that [three women Master's](#) internships and [three PhD/Postdoc fellowships](#) have been awarded for Y8



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Communication Officer

NEW Equal Opportunities
Committee

Congratulations: New Director of the Center for Neuroprosthetics; PhD Public Defense; Internships and Fellowships; IMD Start-up competition selected three of our spin-offs; MyoSwiss finalist in the ZKB Pionierpreis Technopark; Cybathlon: Guinness World Records 2018!

Calls: Conference on Collective Behavior; SNSF Project Funding Call

Open Positions

We will be at...

Press coverage

New videos

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Selected Publications

ROBOTICS WORLD

Top News

[Learning robot objectives from physical human interaction](#)

[The millimeter-scale robot opens new avenues for microsurgery, microassembly and micromanipulation](#)

[Robotic interiors](#)

[New Horizon 2020 robotics projects: RobMoSys](#)

[Robotics innovations at CES 2018](#)

World events

[Robotics Slovenia](#) (12-15 Feb)

[SCHUNK Expert Days](#) (28 Feb - 01 March)

[STIL](#) (01 March)

[HRI](#) (5-8 March)

[European Robotics Forum](#) (13-15 March)

[DATE](#) (19-23 March)

External calls

[RoboSoft](#) (Call for Late Breaking Results)

[ICUAS 18](#) (Full papers)

[ROB-ARCH](#) (for papers)

[fellowships](#) have been awarded for 10.

IMD Start-up competition selected three of our spin-offs

Three NCCR Robotics spin-offs, [Feeltronix](#), [Fotokite](#) and [TWICE](#) were selected amongst 27 start-ups at the IMD Start-up competition. [Read more](#)



MyoSwiss finalist in the ZKB Pionierpreis Technopark

NCCR Robotics spin-off MyoSwiss, was recently selected as a finalist in the ZKB Pionierpreis Technopark. [Read more](#)



Cyathlon: Guinness World Records 2018!

Cyathlon appears as first competition for bionic athletes in the [Guinness World Records](#). We also inform our readers that the 2020 Cyathlon [registration](#) is now open.



NCCR ROBOTICS CALLS

Conference on Collective Behavior

Dario Floreano is co-organizing a conference on Collective Behavior, 7-11th May in Trieste, Italy. [Read more](#)



SNSF Project Funding Call

Researchers can apply for coverage of research costs and staff salaries as well as for the funding of scientific cooperation, networking and communication; however, they may not apply for their own salaries. [Read more](#)



NCCR OPEN POSITIONS

Postdoc & PhD

[Floreano lab](#) currently has three open positions: Postdoc Multifunctional Drone Design, Postdoc or PhD fellowship in Evolutionary Computation / Robotics and one PhD in Multi-Modal Aerial Robots [Read more](#)



2018 EVENT UPDATE - WE WILL BE AT:

NCCR Robotics Annual Retreat

8 - 9 March 2018

Bern

[Read more](#)



European Robotics Forum

13-15 March 2018

Finland

[Read more](#)



Hannover Messe

23-27 April 2018

Germany

[Read more](#)



[ROB ARCH](#) (for papers)

[EXO Berlin](#) (booth registration / speakers)

[ICRA](#) (early bird registration)

[Prix Isabelle Musy 2018](#) (The Isabelle Musy award is open to French-speaking applicants)

Equal Opportunities corner

[Prix Isabelle Musy 2018](#) (The Isabelle Musy award is open to French-speaking applicants)

[Workshop on Gender Equality and Early Career Development](#)

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

Venture Leaders China 2018 - [Swiss startups conquering Asian markets](#)

New [Innosuisse Start-up Training courses all over Switzerland](#)

External positions

[Lecturer/Associate Professor in Robotics](#) (Plymouth University)

[Post-Doctoral Position in Design & Control of an Innovative Collaborative Gripper for Industrial robots](#) (iit)

NCCR Robotics Director

Prof. Dario Floreano

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Conference on Collective Behavior

07-11 May 2018

Italy

[Read more](#)

ICRA

21-25 May 2018

Australia

[Read more](#)

EPFL Drone Days

31 July - 02 August 2018

Lausanne

[Read more](#)

SNSF Site Visit

18 - 19 October 2018

Bern

[Read more](#)

Swiss Robotics Industry Day

01 November 2018

Lausanne

[Read more](#)

Conference on Collective Behavior



**SWISS
ROBOTICS
INDUSTRY
DAY 2018**

We recommend you to keep up to date with:

[CYBATHLON](#)



[DRONE DAYS](#)



PRESS COVERAGE

Feedback enhances brainwave control of a novel hand-exoskeleton

EPFL scientists are developing a lightweight and portable hand exoskeleton that can be controlled with brainwaves. [Read more](#)

NEWS MEDIACOM

EPFL: un exosquelette de la main contrôlé par la pensée (FR)

Des chercheurs de l'EPFL ont développé un exosquelette de la main léger, portable et contrôlable par les ondes... [Read more](#)



EPFL: un exosquelette de la main contrôlé par la pensée (FR)

De tels systèmes pourraient dans le futur offrir une aide pratique et salutaire au quotidien à de nombreuses personnes, selon les chercheurs. [Read more](#)



Feedback enhances brainwave control of a novel hand-exoskeleton

An extremely lightweight and portable hand exoskeleton may one day help the... [Read more](#)



This hand exoskeleton for people with paralysis can be controlled by brainwaves

People with limited mobility or paralysis could be able to use their hands again... [Read more](#)

Evening Telegraph

Brain-controlled robotic hand enhanced by sensory feedback



enhanced by sensory feedback

Scientists from the École Polytechnique Fédérale de Lausanne (EPFL) are developing a hand exoskeleton controlled by... [Read more](#)



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

NEW VIDEOS

EPFL Drone Days



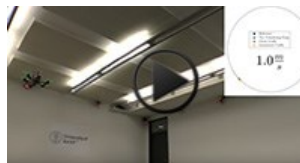
RRL Activities - Summary 2017



Feedback enhances brainwave control of a novel hand-exoskeleton



Differential Flatness of Quadrotor Dynamics Subject to Rotor Drag for Accurate Trajectory Tracking



Péter Fankhauser – Doctoral Thesis Presentation



A drone for last-centimeter delivery



After some start-up difficulties, our robots have become great friends!



NEW MEMBERS

Adriana Arza ([Atienza Lab](#))

Adriana is a postdoctoral researcher, her research interests include biological signal processing, analysis and interpretation of physiological data related to human stress measurement.



DEPARTING MEMBERS

Tomislav Miekovich ([Courtine Lab](#))

Tomislav has started his own research group at the University of Geneva, supported by the SNSF Ambizione award. He works to develop neuroprostheses that restore lost function and translate them into clinical therapies.



SELECTED NCCR ROBOTICS PUBLICATIONS *

M. Faessler, A. Franchi, and D. Scaramuzza, "Differential Flatness of Quadrotor Dynamics Subject to Rotor Drag for Accurate Tracking of High-Speed Trajectories," in *IEEE Robotics and Automation Letters (RA-L)*, 2018.

W. Johal, P. Vogt, J. Kennedy, M. de Haas, A. Paiva, G. Castellano, "Workshop on Robots for Learning – R4L," in *HRI ACM/IEEE International Conference on Human-Robot Interaction*, 2017.

K. Lee, D. Liu, L. Perroud, R. Chavarriaga and J. d. R. Millán, "Endogenous Control of Powered Lower-Limb Exoskeleton," in *2nd International Symposium on Wearable Robotics Biosystems and Biorobotics*, 2017.

D. Liu, W. Chen, R. Chavarriaga, Z. Pei and J. d. R. Millán, "Decoding of Self-paced Lower-Limb Movement Intention: A Case Study on the Influence Factors," in *Frontiers In Human Neuroscience*, vol. 11, 2017.

J. Shintake, V. Cacucciolo, D. Floreano and H. Shea, "Soft Robotic Grippers," in *Advanced Materials*, 2018.

K. Schmidt, J. E. Duarte, M. Grimmer, A. Sancho-Puchades, H. Wei, C. S. Easthope, and R. Riener, "The Myosuit: Bi-articular Anti-gravity Exosuit That Reduces Hip Extensor Activity in Sitting Transfers," in *Front. Neurobot.*, 27 October 2017.

*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 Centre of Competence in Robotics (NCCR Robotics) is a federally funded programme bringing together robotics laboratories from [EPFL](#), [ETH Zurich](#), [University of Zurich](#), [IDSIA](#) and [UNIBE](#) to work on wearable, rescue and educational robots.

Leading House



Co-leading House



SWISS NATIONAL SCIENCE FOUNDATION

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