



NCCR NEWS



Swiss Robotics Industry Day

Within the framework of the NCCR Robotics programme, we are organising the first Swiss Robotics Industry Day on 04-Nov 2015 at the Swiss Tech Convention Center in Lausanne. [Read more](#)

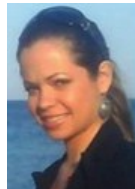
**SWISS+
ROBOTICS
INDUSTRY
DAY**

A folding robot weighing 4 grams that crawls and jumps

Jamie Paik's lab, ([RRL](#) - EPFL) has come up with a folding, reconfigurable robot that is capable of crawling and jumping. Modelled on the inchworm, it represents a new paradigm in robotics. [Read more](#)

Two New Professors

We warmly welcome two new [ETHZ](#) Professors: [Walter Karlen](#) and [Margarita Chli](#). They will be working in the [Wearable Robotics Grand Challenge](#). NCCR Robotics is currently made up of 21 different research groups across Switzerland.



CONGRATULATIONS

Inaugural Lecture

David Atienza's inaugural lecture entitled "*Designing embedded systems for the new era of computing*" took place on 24th September at EPFL. [Read more](#)



New Assistant Professor

Marco Hutter ([ASL](#) - ETH Zurich) was appointed Assistant Professor in Robotics Systems at ETH Zurich. [Read more](#)



Stéphanie Lacour

Stéphanie Lacour was listed amongst the Robohub *25 Women in Robotics You Need to Know About - 2015*. [Read more](#)



Thesis Defense

Klas Kronander ([LASA](#) - EPFL) presented his thesis defense: "*Control and Learning of Compliant Manipulation Skills*" at EPFL on 4th September 2015.



Przemyslaw Kornatowski one of the "Innovators under 35"

Przemyslaw Kornatowski ([LIS](#) - EPFL) has been shortlisted in the Polish chapter of the Innovators under 35 competition for his work with robots for rescuing victims after disasters. [Read more](#)



ROBOTICS WORLD

Top News

[25 women in robotics you need to know about - 2015](#)

[Courtship of the drone fireflies: A short movie with flying robots and lights](#)

[Work, play and STEM: How robotics will bridge the gap](#)

[Talking Machines: Treating cancer clusters, with Quaid Morris](#)

[In-situ Fabricator: An autonomous construction robot](#)

World events

[SSRR 2015](#) (18-20 Oct)

[Robotics Innovation show](#) (20-21 Oct)

[A new approach to risk management: safe integration of RPAS into civil airspace & civil operations](#) (21 Oct)

[New Friends - International Conference on Social Robots in Therapy and Education](#) (22- 23 Oct)

[Intl Conf on Social Robotics \(ICSR\)](#) (26-30 Oct)

[Les Rencontres de la Robotique](#) (27 Oct)

[Les Rencontres de la Robotique - 2ème édition](#) (27 Oct)

[Robotworld](#) (28-31 Oct)

[Field and Assistive Robotics \(FAR-9\)](#) (30 Oct - 01 Nov)

[Humanoids](#) (3-5 Nov)

[Robot Film Festival](#) (7 Nov)

[Asian Robotics Week](#) (12-13 Nov)

[RE.WORK](#) (12-13 Nov)

External calls

[UAE Drones for Good Award](#)

[International Bionic Award 2016](#)

[RoboExpos](#)

[Innovation Competition WearRA](#)

[European Robotics Forum](#)

External positions

[Robotics Engineers \(Perception, Motion Planning, Embedded Systems\)](#) Auro Robotics

Flyability ranks third at TOP 100 Startup Award 2015

NCCR Robotics Spin Fund [Flyability](#) ranked third from over 100,000 young companies at the STARTUP AWARD where the 100 most innovative and promising Swiss start-ups were selected [Read more](#)



Perspective Robotics

NCCR Robotics Spin Fund [Perspective Robotics](#) recently raised over 350k USD in a crowdfunding campaign for [Fotokite Phi](#). This summer they were also awarded the [Qualcomm QPrize Europe](#).



Interesting links

[Technology has created more jobs than it has destroyed, says 140 years of data](#)

[California to Ban Flying a Drone Over Someone's Property Without Permission](#)

[Global Assessment Report on Disaster Risk Reduction 2015](#)

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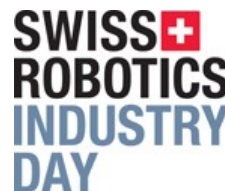
WE WILL BE AT:

Swiss Robotics Industry Day

04 Nov

Swiss Tech Convention Center

[Read more](#)



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:



Insightness

Insightness develops visual positioning systems for mobile robots and smart glasses. These systems use event-based vision sensors that encode information in a highly efficient, brain-inspired way. [Read more](#)



NCCR PRESS COVERAGE

Cyathlon practice session a success

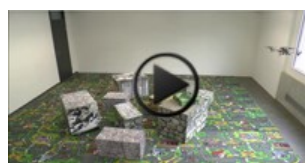
28 teams, 54 staff members and 73 volunteers, helped to make the Cyathlon rehearsal event a success. [Read more](#)



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

NEW VIDEOS

Autonomous, Flying 3D Scanner



A robotic arm that learns from the brain



Collaborative Navigation for

Dynamic locomotion in complex environments

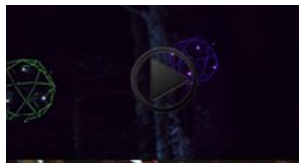


4-gram "origami" robot that crawls and jumps



Drone Courtship

Flying and Walking Robots



GUESS WHO?

Can you guess who this NCCR professor is?

This professor's interest in engineering started when he was very young, he never liked to do things that were easy or that were planned for his age but enjoyed more complicated challenges. [Read more](#)



NEW MEMBERS

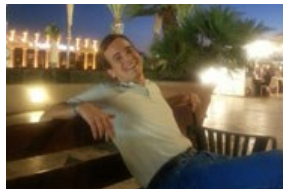
Davide Falanga ([RPG](#) - [UZH](#))

Davide Falanga is a PhD student at the University of Zurich (UZH) in the Robotics and Perception Group. His research interests lie in the area of dynamical systems, control and trajectory planning for autonomous aerial vehicles.



Laurent Dejace ([LSBI](#) - [EPFL](#))

Laurent Dejace is a PhD at the Swiss Federal Institute of Technology (EPFL). He is working on stretchable materials with tactile sensing capabilities used for wearable robotics applications.



Min Liu ([INI](#) - [UZH](#) / [ETH Zurich](#))

Min Liu is a PhD student at ETH Zurich with a major in Electrical Engineering and machine vision. His research focuses on a miniaturised neuromorphic camera for mobile applications.



DEPARTING MEMBERS

Jawad Nagi ([IDSIA](#))

Jawad is in the process of submitting his thesis for defence in the upcoming months. He will then take up the position of research associate at the Luzern University of Applied Sciences and Arts.



SELECTED NCCR PUBLICATIONS *

C. Forster, L. Carlone, F. Dellaert and D. Scaramuzza, "IMU Preintegration on Manifold for Efficient Visual-Inertial Maximum-a-Posteriori Estimation", in *Robotics: Science and Systems* (RSS), Rome, 2015.

I. Iturrate, R. Chavarriaga, L. Montesano, J. Minguéz and J. d. R. Millán, "Teaching brain-machine interfaces as an alternative paradigm to neuroprosthetics control", *Scientific Reports*, vol. 5, num. 13893, 2015.

M. E. Karim, S. Lemaignan and F. Mondada "A review: Can robots reshape K-12 STEM education?", in *2015 IEEE International Workshop on Advanced Robotics and its Social Impacts* (ARSO 2015), Lyon, France, July 1-3, 2015.

R. Leeb, L. Tonin, M. Rohm, L. Desideri, L. T. Carlson and J.d. R. Millán, "Towards Independence: A BCI Telepresence Robot for People with Severe Motor Disabilities",

in *Proceedings of the IEEE, Piscataway: Ieee-Inst Electrical Electronics Engineers Inc*, vol. 103, no. 6, pp. 969-982, 2015.

E. Mueggler, N. Baumli, F. Fontana and D. Scaramuzza, "*Towards Evasive Maneuvers with Quadrotors using Dynamic Vision Sensors*", in *European Conference on Mobile Robots (ECMR)*, Lincoln, UK, 2015.

E. Mueggler, G. Gallego and D. Scaramuzza, "Continuous-Time Trajectory Estimation for Event-based Vision Sensors", in *Robotics: Science and Systems (RSS)*, Rome, Italy, 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 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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