



Davide Scaramuzza

Assistant Professor

Director of the Robotics and Perception Group

Department of Informatics
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Nationality: Italian
Date of Birth: April 2, 1980
Place of Birth: Terni, Italy

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Languages: Italian (native), English, French, German, Spanish

Lab webpage: <http://rpg.ifi.uzh.ch>

Homepage: http://rpg.ifi.uzh.ch/people_scaramuzza.html

Google Scholar: scholar.google.com/citations?hl=en&user=SC9wV2kAAAAJ

Citations: ~ 7,000 - H-Index: 32 - H10 index: 56

Education

03/2005 - 02/2008



PhD in Robotics and Computer Vision, ETH Zurich.

Advisor: Prof. Roland Siegwart. Winner of the *Robotdalen Scientific Award (20k EUR)* and *finalist of the George Giralt PhD Award*.

09/1999 - 07/2004



Laurea Degree (equivalent to Bachelor + Master) in Electronics and Information Engineering, University of Perugia, Italy.

Distinction: 110/110, *Summa Cum Laude and Dignity of Printing + Two awards (5k EUR)*.

Academic Positions

02/2012 – Today



- **Assistant Professor in Robotics, University of Zurich**
- Founder and Director of the Robotics and Perception Group
- Associate Faculty at Wyss Zurich
- **Co-founder of the Zurich Eye project within the Wyss Zurich**

01/2011 – 01/2012



Post-doc and EU project coordinator. GRASP Lab, University of Pennsylvania

Advisor: Prof. Vijay Kumar and Prof. Kostas Daniilidis

02/2008 – 12/2010



Post-doc, Lecturer, EU project coordinator, and Project Leader. ETH Zurich

Advisor: Prof. Roland Siegwart

10/2009 – 12/2009



Invited Research Scientist at the Council for Scientific and Industrial research (CSIR), Pretoria, South Africa

Employer: Dr. Simukai Utete

07/2006 – 02/2008



Research and Teaching Assistant (PhD student). ETH Zurich,

Advisor: Prof. Roland Siegwart

02/2005 – 07/2006



Research and Teaching Assistant (PhD student). EPFL Lausanne,

Advisor: Prof. Roland Siegwart

EU Project Coordination



Scientific coordinator of the **European Project sFly (Swarm of Micro Flying Robots)** (2009-2012)

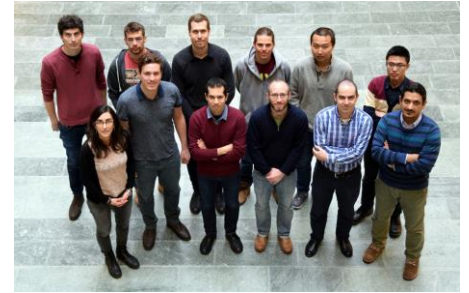
Lab spin-offs

Zurich Eye: Machines that can see – Develops visual-inertial navigation solutions for mobile robots. Created in Sep. 2015. Since 2016 part of Facebook-Oculus VR Zurich.



My Research Team

My core research team (the Robotics and Perception Group) currently consists of 6 PhD students and 2 Postdocs. I also regularly host researchers from top research institutions (e.g., MIT, Caltech, INRIA, Max Planck), who stay for several months. Lab webpage: <http://rpg.ifi.uzh.ch>



Awards

2016 **IROS'16 Best Application Paper Finalist**

2016 **BMVC'16 Best Industry Paper Award**

2016 **AAAI Best Video Award Finalist**

2015 **Best Paper Award Finalist at RSS'15**

2014 **ERC-SNSF Starting Grant, 1.6 M EUR**

2014 **IEEE Robotics and Automation Early Career Award (academia)**
"For his major contributions to robot vision and visually-guided micro aerial vehicles".



2014 **KUKA Innovation Award**
(worldwide competition, 20,000 EUR)



2014 **Google Faculty Research Award (90,000 USD)**
4 awards were assigned by Google worldwide in the area of robotics; mine was the only one outside United States.



2012 **European Young Researcher Award** - Sponsored by EU and Euroscience

2010 **Finalist of the George Giralto EURON PhD Award, 2010** - Sponsored by EuRobotics

2009 **ROBOTDALEN Scientific Award, 2009** (20,000 Euros in prize money) for the best PhD thesis, worldwide, in robotics and automation, with the largest social, economic, and industrial impact. Sponsored by EU, IEEE, ABB, and VOLVO.

2009 **2nd place winner at the European Micro Aerial Vehicle competition, 2009.**

2005 **FEDERCOMIN-Aica Italian Master thesis Award, 2005** - 5,000 Euros in prize money by Minister of Innovation. Sponsored by the Confederation of Italian industries and the Conference of the Rectors of Italian Universities.

2004 **Best student of the year Award 2004** (800 Euros in prize money) as best Master student in his home University

1998 Finalist at the Italian Mathematical Olympiads

Promotion by the UZH Rector

Three consecutive promotions by the UZH rectors Andreas Fischer and Michael Hengartner in 2013, 2014, and 2015 for outstanding achievements.

Promotion of Young Researchers

2016 Timo Horstschaefter wins **ETH Fritz-Kutter ETH Award**

2016 Beat Kueng get IROS16 **Best Application Paper Award** finalist

2016 Henri Rebecq wins **BMVC'16 Best Industry paper Award**

2016 Elias Mueggler wins **Qualcomm Innovation Award** (40k USD): [LINK](#)

2015 Dr. Guillermo Gallego wins **UZH Forschungskredit** (100k CHF)

2014 Basil Huber wins **Fritz-Kutter ETH Prize** (10k CHF) – Best Master thesis in Industry-related Computer Science at a Swiss University. Thesis title: High-Speed Pose Estimation using a Dynamic Vision Sensor: [LINK](#)



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- 2014 2014.06.04 - **KUKA Innovation Award** (20,000 EUR): Elias Mueggler, Flavio Fontana, and Matthias Faessler (PhD students in my group): [LINK](#)
- 2014 Christian Forster and Dr. Reza Sabzevari win **UZH Forschungskredit** (100k CHF each)
- 2013 Benjamin Keiser wins **KUKA Best Student Project Award 2013** with his Master thesis *Torque Control of a KUKA youBot Arm*: [LINK](#)

TEDx Talk

TEDxZurich – 25 October 2012, Swiss National TV studios, “Autonomous, Vision-Controlled Micro Flying Robots”: <https://youtu.be/KQpKQXU7dkM>



Citation Indices

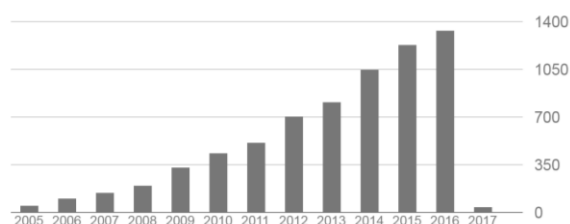
Total number of citations on Google Scholar: ~ 7000

Scholar H-index: 32

Scholar i10-index: 56

<http://scholar.google.com/citations?user=SC9wV2kAAAAJ&hl=en>

Citations per year



Teaching Activities

- 2016 - Today ETH and UZH, “Vision Algorithms for Mobile Robotics”
- 2013 – 2015 University of Zurich, “Fundamentals of Computer Vision and Image Processing”
- 2012 – Today ETH / University of Zurich, “Autonomous Mobile Robots”
- 2014 – Today [edX course “Autonomous Mobile Robots”](#)
14,000 applications were received and 500 passed the final exam.
- 2015 Two Certificates of Advanced Study (CAS) on computer vision
- 2008 – 2010 ETH Zurich, Lecturer of the Masters course “Autonomous Mobile Robots”
- 2006 Teaching Assistant for the course on C++ Programming
- 2005 Teaching Assistant for the course on C++ Programming



Invited speaker (conferences, workshops, summer schools)

2016

- NCCR Robotics Industry Day, Zurich, November, 2016 (**keynote speaker**)
- IEEE IROS'16 Tutorial on Visual SLAM, Daejeon, South Korea, October, 2016 (**keynote speaker**)
- IEEE Colombian Conference on Robotics and Automation, Bogota, September, 2016 (**keynote speaker**)
- 14th International Conference on Intelligent Systems, Shanghai, July, 2016 (**plenary speaker**)
- 20th Robocup Symposium, Leipzig, July 2016 (**keynote speaker**)
- Machine Intelligence Summit, Berlin, June 2016 (**keynote speaker**)
- SHERPA summer school, June, Trento, Italy 2016
- Tutorial on Micro Aerial Vehicles, Int. Conference on Robotics and Automation, ICRA16, Stockholm
- University of Sao Paulo, Brazilian Symposium on Robotics and Mechatronics, May, 2016 (**plenary speaker**)

2015

- Dagstuhl School on Vision for Autonomous Vehicles, November, 2015
- International Workshop on Software Engineering for Resilient Systems, Paris, September, 2015 (**keynote speaker**)
- Int. Conference on Intelligent Robotics and Applications, Portsmouth, UK, August, 2015 (**plenary speaker**)
- Armasuisse UAV workshop, Thun, July, 2015
- IEEE Italy Section Summer School, Perugia, June, 2015.
- Int. Workshop on “The problem of mobile sensors: setting future goals and indicators for SLAM”, RSS'15, May, 2015
- Innorobo, Workshop on “Towards Robust and Safe Autonomous Drones”, Lyon, July, 2015. (**keynote speaker**)
- International Workshop on “Scaling up active perception”, ICRA'15, Seattle, May, 2015
- International Workshop on Neuromorphic Sensing, ICRA'15, Seattle, May, 2015

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- International Workshop on Taxonomy of Interconnected Systems, ICRA'15, Seattle, May, 2015
- Armasuisse Workshop on Multi-agent systems, Thun, May 2015.
- Computer vision Winter workshop, Graz, February 2015 (**keynote speaker**)
- Workshop on Future UAS Technologies, Thun, Switzerland, Jan. 2015

2014

- Int. Summer School on Cooperation of Robots and Sensor Networks for Emergency Response, TU Darmstadt, Sep. 2014 (**keynote speaker**)
- 3rd Int. Workshop on Visual Control of Mobile Robots (IROS'14), Chicago, Sep. 2014
- Int. Workshop on Aerial Open Source Robotics (IROS'14), Chicago, Sep. 2014
- Int. Workshop on Transducers for robot autonomous navigation, Benevento, Italy, Sep. 2014 (**keynote speaker**)
- International Data Fusion and Big Data Workshop, Thun, ArmaSuisse, Switzerland, August 2014
- 3rd Workshop on Resource-efficient Integration of Planning and Perception for true autonomous operation of Micro Air Vehicles (MAVs) (RSS'14), Berkley, July, 2014 (**keynote speaker**)
- 2nd International workshop on Multi-Unmanned Vehicle Systems (**keynote speaker**), Compiègne, France, July, 2014
- 12th Int. Workshop on Non-classical Cameras, Camera Networks and Omnid. Vision (ICRA'14), Hong Kong, June, 2014.
- International Workshop on Robotic Sensor Networks (**keynote speaker**), Berlin, April, 2014

2013

- 5th Workshop on Planning, Perception and Navigation for Intelligent Vehicles (IROS'13), (**keynote speaker**)
- French National Robotics Days (Journées Nationales de la Recherche en Robotique), Annecy, Oct., 2013
- 4th JRC ECML Workshop on Unmanned Aerial Systems for Rapid Mapping, Geneva, September, 2013
- Workshop on "Towards a Swiss Robotic Rescue Team" (**keynote speaker**), (ICRA'13), 2013

2012

- AIROBOTS Summer School on Micro Aerial Vehicles, Zurich, July 2012.
- Workshop on "Open problems and challenges in aerial robotics Europe", (RSS'12), (**keynote speaker**), 2012

2008 – 2011

- International Mechanical Engineering Congress IMPULSO, (**keynote speaker**) Monterrey, November, 2011.
- SFLY Summer School on Micro Aerial Vehicles, Zurich, July 2011
- Workshop on continuous geo-positioning of individuals, organized by Armasuisse, Switzerland, 2010.
- IEEE International Workshop on Safety, Security & Rescue Robotics (SSRR'10) (**keynote speaker**), 2010
- Brazilian Symposium on Robotics and Mechatronics (SEMATRON'10) (**keynote speaker**), Sao Paulo, 2010.
- Workshop on Omnidirectional Robot Vision (**keynote speaker**), held during ICRA'10, Alaska, May, 2010
- Workshop on Communication, Control, and Perception for Teams of Small Robots, ICRA'10, May, 2010.
- Workshop on Good Experimental Methodology and Benchmarking in Robotics Research, EURON, 2010.
- International Conference on Cognitive Systems (CogSys'09), Zurich, Switzerland, January 2010.
- South-African Conference on Pattern Recognition (PRASA'09) (**keynote speaker**), Cape Town, 2009.
- South-African Conference on Robotics, Johannesburg (**keynote speaker**), November 9, 2009.
- Swedish Workshop on Robotics, Vasteras, Sweden, September 8, 2009.
- International Workshop on Visual Mapping and Navigation in Outdoor Environments, ICRA'09, 2009.
- First International Workshop on Omnidirectional Robot Vision, November 4, 2008, Venice, Italy.

Invited seminars

- CMU Robotics Institut Seminar Series, February, 2017
- Universidad Pontificia de Bogota, September, 2016.
- USP Sao Paulo (inviter Prof. Dr. Marcelo Becker), May 2016
- Qualcomm, Vienna, October. 2015
- MIT, (inviter Andrea Censi) May, 2015
- Indian Institute of Technology at New Delhi, Allahabad, and Kanpur (inviter SwissNex India), March 2015.
- University of Zaragoza (inviter Prof. Jose Neira), Dec. 2014
- University of Naples Federico II (inviter Prof. Bruno Siciliano), Sep, 2014
- ETH Computer Vision Lab (inviter Prof. Luc Van Gool), August, 2014
- Carnegie Mellon University (inviter Prof. Sanjiv Singh), July 2014.
- Polytechnique of Torino (inviter Prof. Marcello Chiamberge), July 2014
- Advanced Center for Aerospace Technologies and University of Seville (inviter Prof. Anibal Ollero), September 2013.
- USC Viterbi School of Engineering, Los Angeles (inviter Prof. Gaurav Sukhatme), March 2012.
- EPFL Lausanne, (inviter Prof. Dario Floreano and Prof. Auke Ijspeert), March, 2011.

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- University of Zurich, (inviter Prof. Rolf Pfeifer), February, 2011.
- Invited talk at the „Einführungstag für Master-Studierende“ (inviter Rector of ETH Zurich), September 2010.
- Dynamic maps seminar (inviters Prof. Marc Pollefeys), Dagstuhl, 2010.
- GRASP Lab, University of Pennsylvania (inviters Prof. Kostas Daniilidis and Prof. Vijay Kumar, July, 2010
- Italian National Center of Research (CNR), Bari, July, 2010.
- NASA Jet Propulsion Laboratory (JPL), (inviter Dr. Larry Matthies), Pasadena, US, May, 2010.
- University of California Los Angeles (UCLA), (inviter Prof. Stefano Soatto), Vision Lab, US, May, 2010
- Caltech, NESS seminar series, (inviter Prof. Pietro Perona), US, May, 2010
- University of Southern California (USC), (inviter Prof. Gaurav Sukhatme), Los Angeles, US, May, 2010.
- Stanford University, Artificial Intelligence Lab, (inviter Prof. Oussama Khatib), US, May, 2010.
- Willow Garage, Menlo Park, (inviter Dr. Kurt Konolige), US, May, 2010.
- Technical University of Crete, Chania, (inviter Prof. Dimitrios Rovas) Greece, April, 2010.
- Department of Information Engineering, (inviter Prof. Emanuele Menegatti), University of Padua, 2010.
- Caltech, Computational Vision Lab (inviter Prof. Pietro Perona), Pasadena, CA, November 6, 2007.
- Department of Information Processing and Electronics, (inviter Prof. Paolo Valigi) University of Perugia, 2007.
- INRIA, Grenoble, (inviter Prof. Christian Laugier), Grenoble, France, January, 2007.
- Swiss Federal Institute of Technology Lausanne (EPFL), (inviter Prof. Pascal Fua), December, 2005.

Summer school organizer

- First summer school on “Autonomous micro aerial vehicles: design, perception, and control”, 2011, ETH Zurich

Workshop organizer

- “Event-based Vision”, ICRA, Singapore, June, 2017
- “Vision-based High Speed Autonomous Navigation of UAVs”, IROS, Daejeon, South Korea, October, 2016
- “Vision-based Control and Navigation of Small, Light-Weight UAVs”, IROS, Hamburg, Germany, October, 2015.
- “Innovative Sensing for Robotics: Focus on Neuromorphic Sensors”, ICRA, Seattle, USA, May, 2015
- “Computer Vision in Vehicle Technology with Special Session on Micro Aerial Vehicles”, ECCV, Zurich, Switzerland, 2014
- “Omnidirectional Vision, Camera Networks and Non-classical Cameras, ICRA, Hong Kong, China, May, 2014
- “Vision-based Control and Navigation of Micro Helicopters in GPS-denied Environments”, IROS, Tokyo, Japan, October, 2013
- “Micro-UAV Perception and Control”, ICRA, Shanghai, China, May, 2011

Journal Associate Editor

- **Associate Editor for the IEEE Transactions on Robotics** (since November 1, 2014)

Journal guest editor

- 2016 - “Autonomous Robots” journal, special issue titled “Active Perception”
- 2012 - “Autonomous Robots” journal, special issue titled “Micro UAV, Perception and Control”

Conference services

- **Demo Chair** of ECCV’14
- **Associate Editor** of ICRA’12-13-14-15-16 and IROS’13-14-15-16

Project Proposal Reviewer

- SNSF (Swiss National Science Foundation), 2016
- ETH Grants, 2016
- Agence Nationale de la Recherche (French Research Council), 2014
- Netherlands Organisation for Scientific Research (NWO) 2014
- Veni Grants (Netherlands) 2013

Program Committee Member of International Conferences

- Robotics Science and Systems (RSS) (since 2010)
- IEEE Int. Conf. on Robotics and Automation (ICRA) (since 2006)
- IEEE/RJS Int. Conf. on Intelligent Robots and System (IROS) (since 2007)
- International Conference on Computer Vision (ICCV) (Since 2009)
- International Conference on Computer Vision and Pattern Recognition (since 2011)
- International Symposium of Robotics Research (ISRR’09)
- European Conference on Computer Vision (since 2011)
- International Conference on Computer Vision and Pattern Recognition (CVPR) (since 2011)

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- AAI Conference on Artificial Intelligence (since 2011)
- 8th Int. IFAC Symposium on Robot Control (SYROCO'06)
- IEEE Conf. on Automation Science and Engineering (CASE'07)
- Int. Conf. on Field and Service Robotics (FSR'07)
- German Workshop on Robotics (GWR'09)
- International Conference on Unmanned Aerial Vehicles (UAV'10)

Journal Reviewer

- IEEE Transactions of Robotics (T-RO) (since 2008)
- IEEE Transactions of Pattern Analysis and Machine Intelligence (TPAMI) (since 2011)
- Autonomous Robots (AURO) (since 2011)
- Journal of Field Robotics (JFR) (since 2009)
- International Journal of Robotics Research (IJRR) (since 2009)
- Robotics and Automation Magazine (RAS) (since 2008)
- International Journal of Computer Vision (IJCV) (since 2010)
- Journal of Image and Vision Computing (IMAVIS'10)
- Robotics and Autonomous Systems, Elsevier (since 2009)
- EURASIP Journal on Image and Video Processing (since 2009)
- Computer Vision and Image Understanding (since 2008)
- IET Computer Vision (IET'08)
- IEEE Transactions on Instrumentation and Measurement (2008)
- Elsevier, Pattern Recognition Letters (since 2008)

Reviewer and Examiner of PhD Theses

- 2017 – **ETH Zurich**, Lorenz Meier, (student of Marc Pollefeys)
- 2016 – **INRIA Marseille**, Stefano Mafra (student of Franck Ruffier)
- 2016 – **Upenn**, Dr. Roy Anati, (student of Kostas Daniilidis)
- 2016 – **University of Perugia**, Gabriele Costante (student of Paolo Valigi)
- 2016 – **ETH Zurich**, Olivier Saurer (student of Marc Pollefeys)
- 2016 – **EPFL Lausanne**, Maja Varga (student of Dario Floreano)
- 2015 – **University of Cape Town**, Natasha Govender
- 2015 – **ETH Zurich**, Andreas Nussberger (student of Luc Van Gool)
- 2015 – **University of Halmstad**, Sweden, (student of Roland Philippsen)
- 2015 – **USP**, Univ. of Sao Paulo, Brasil, Raphael Coronel (student of Marcelo Becker)
- 2014 – **University of Zaragoza**, Dr. Yasir Latif (student of Jose Neira)
- 2014 – **University of Pennsylvania**, Dr. Shojie Shen, (student of Vijay Kumar)
- 2014 – **Freie Universitaet Berlin**, Dr. Sven Oluf (student of Markus Vincze and Raul Rojas)
- 2014 – **University of Coimbra**, Michel Antunes, (student of Joao Barreto)
- 2014 – **INRIA**, Grenoble, Dr. Chiara Troiani (student of Christian Laugier)
- 2014 – **Max Planck Institute**, Dr. Volker Grabe (student of Heinrich Bulthoff and Paolo Robuffo Giordano)
- 2013 – **EPFL Lausanne**, Dr. Adrien Briod (student of Dario Floreano)
- 2013 – **EPFL Lausanne**, Dr. Amanda Prorok, (student of Alcherio Martinoli)
- 2013 – **Politecnico of Milan**, Dr. Ehsan Asadi (Student of Carlo Bottasso)
- 2012 – **ETH Zurich**, Dr. Laurent Kneip (student of Roland Siegwart)
- 2012 – **ETH Zurich**, Dr. Sergei Lupashin (student of Raff D'Andrea)

Attraction of International Visiting Scientists

Since my appointment at UZH, my research has attracted Postdocs, PhD students, and undergraduate students from international and world top institutions:

- **Caltech/MIT**: Dr. Andrea Censi spent 6 months visiting my lab from 2012 to 2013.
- **Georgia Tech**: Dr. Guillermo Gallego is currently a postdoc in my lab since 2014.
- **Carnegie Mellon University**: Xin Yu and Sahuria Shankar Kumar were visiting Msc students in my lab in 2014
- **ETH Zurich**: My 4 PhD students and 1 Postdoc all graduated from ETH Zurich.
- **Max Planck**: Dr. Volker Grabe spent 1 year as visiting PhD student in my lab from 2012 to 2013.
- **INRIA**: Dr. Chiara Troiani spent 9 months as visiting PhD student in my lab in 2013.
- **Italian Institute of Technology**: Dr. Reza Sabzevari is currently Postdoc in my lab since 2013
- **Beijing Institute of Technology**: Dr. Yanhua Jiang spent 1 year as visiting PhD student in my lab ifrom 2012 to 2013.

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- **University of Sao Paulo in Brazil:** Ms Nathaly Gasparin is currently a visiting Bsc student in my lab.
- **University of Cape Town:** Ms Ra'eesah Mangera is currently visiting Msc student in my lab

Postdoc Supervision

Current: Jeffrey Delmerico, Guillermo Gallego

Past: Manuel Werlberger, Matia Pizzoli, Andras Majdik, Reza Sabzevari, Sergei Lupashin

Graduated PhD students

2016 - Christian Forster (Summa cum Laude), external reviewers: Stefan Leutenegger (Imperial College), Marc Pollefeys (ETH Zurich)

PhD Student Supervision

Since 2012 (since assistant professor at UZH)

- **Current PhD students:** Christian Forster, Titus Cieslewski, Matthias Faessler, Elias Mueggler, Flavio Fontana, Henri Rebecq, Davide Falanga, Zichao Zhang

From 2011 to 2012 (during my Postdoc at Upenn)

- **PhD students:** Roy Anati

From 2008 to 2011 (during my postdoc at ETH Zurich)

- **PhD students:** Laurent Kneip, Markus Achtelik, Stephan Weiss

Undergraduate Student Supervision

During my assistant Professorship at UZH

- **Master and Bachelor students:** Christian Saner, Dominik Schlegel, Maurice Goeldi, Jonas Strubel, Yves Albers-Schoenberg, Daniel Heid, Jan Portmann, Mitchel Bakker, Oliver Brand, Tim Oberhauser, Fabrizio Cortesi, Yves Albers-Schoenberg, Karl Schwabe, Christian Krebs, Jonas Strubel, Benjamin Keiser, Basil Huber, Luca Longinotti, Marco Fischer, Christian Saner, Adrian Rechy, Jonas Schuler, Astrid Schlestain, Raphael Meyer, Ali Alawieh, Maximilian Schulz, Henrique Mendonca, Amos Zweig, Nathan Baumli, Eren Allak, An Phi Nguyen, Andreas Forster, Michael Gassner, Nathan Baumli, Stefan Isler, Jon Lund, Arthur Toenz, Igor Bozic, Pavel Vechersky, Micha Brunner, Lorenz Wellhausen, Joachim Ott, Imanol Studer, David Tedaldi, Raphael Meyer, Felix Renaut, Vincent Mai, Michael Spring, Fabian Weiersmueller, Beat Küng, Mathis Kappeler, Kevin Egger, Julia Nitsch, Simon Schmid, Timo Horstschäfer, Filippo Martinoni, Jonathan Huber, Yawei Ye, Philipp Fohn, Mathis Kappeler, Alessio Zanchettin, Micha Brunner, Valentin Wueest

During my Postdoc at Upenn

- **Master students:** Yida Yang, Bradley Powers, Sanchit Arora

During my time at ETH Zurich

- **Master and Bachelor students:** Abram Oyoqui, Joseph Kruijen, Simon Zingg, Giuseppe Loianno, Marco Zamponi, Martin Ruffli, Philipp Reist, Christian Berclaz, Pascal Lutz, Berchtold Jan, Daniel Eberli, Gabriel Nuetzi, Michael Bloesch, Simon Zingg, Amadeo Knuesel, Sammy Omari, Gregory Hitz, Ivo Leibacher, Ingo Jenni

During my time at EPFL

- **Master and Bachelor students:** Nicolas Criblez, Laurent Nguyen, Jean-Luc Brocard, Severine Stalder

Member of UZH Professor Hiring Committees

- 2016 – Professorship on Child and Welfare Development (UNICEF)
- 2016 – Professor in Development Economics
- 2014 – Professor in Neuroeconomics

International Robot Competitions

2016	MBZIRC (Mohamed Bin Zayed International Robotics Challenge)
2015	DARPA FLA (Fast Lightweight Autonomy) – ongoing
2014	KUKA Innovation Award (Winner, 20k EUR)
2009	EMAV: European Micro Aerial Vehicle Competition , (2 nd place winner): LINK

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Public Exhibitions

- **NCCR Industry Day**, Nov. 2016, 500 visitors
- **SSRR'16 Conference**, Oct. 2016, 100 visitors
- **NCCR Industry Day**, Nov. 2015, 500 visitors
- **Scientifica, Zurich**, Sep. 2015, 20,000 visitors
- **IROS'15**, Hamburg, 02.10.2015, 150 visitors
- **ICRA'15**, Seattle, 27.06.2015, 150 visitors
- **SwissCore**, Brussels, 12.05.2015, 100 visitors
- **CeBIT Expo**, Hannover, 16-20.03.2015, 30,000 visitors
- **AUTOMATICA, Munich**, 3.-6.06.2014, 31,000 visitors [[Link](#)] [[Video](#)]
- **TunZurich, Zurich**, 23-25 October, 2013, 1,000 visitors
- **Scientifica, Zurich**, 31-01 September, 20,000 visitors, 2013
- **Robotic Festival** Lausanne, EPFL, 20 April, 2013, 10,000 visitors
- **Robots on Tour**, Zurich, 09 March, 2013, 4,000 visitors



Media Coverage

2016

- 19.11.2016 – **International Federation of Robotics**, 2016 World Robotics report [[Link](#)]
- 05.10.2016 – **Robohub** – "Drone flight through narrow gaps using onboard sensing and computing" [[Link](#)]
- 28.09.2016 – **IEEE Spectrum** – "Aggressive Quadrotors Conquer Gaps With Ultimate Autonomy" [[Link](#)]
- 19.09.2016 – **Alumni Magazine** – "Autonomous Vision-based Navigation" [[Link](#)]
- 16.05.2016 – **Sensefly Waypoint** – "A Question of Perception (Part 2)" [[Link](#)]
- 01.05.2016 – **Science & Vie** – "Les premiers drones à pouvoir se repérer tout seuls en forêt" [[Link](#)]
- 01.05.2016 – **Technology Review** – "Drohnen: Mehr Autonomie wagen" [[Link](#)]
- 18.04.2016 – **Sensefly Waypoint** – "A Question of Perception (Part 1)" [[Link](#)]
- 05.04.2016 – **NVIDIA GTC 2016** – "Introduction of Opening Keynote (1:27-1:34)" [[Link](#)]
- 31.03.2016 – **SPARC Robotics** – "Why making robots is still hard" [[Link](#)]
- 29.03.2016 – **CEMS** – "The Digital Revolution in Partnership with Deloitte" [[Link](#)]
- 12.02.2016 – **Discovery Channel Canada** [[Link](#)]
- 10.02.2016 – **SRF Tagesschau**, Fliegende Spürhunde [[Link](#)]
- 11.02.2016 – **The Verge**, Autonomous search-and-rescue drones outperform humans at navigating forest trails [[Link](#)]
- 11.02.2016 – **Wired**, This drone uses AI to find its way through a forest [[Link](#)]
- 11.02.2016 – **IEEE Spectrum**
- 10.02.2016 – **NBC News**, Trail-Following Drones Could Locate and Guide Lost Hikers [[Link](#)]
- 10.02.2016 – **Gizmodo**, These Rescue Drones Search Forest Trails Like Robot Rangers [[Link](#)]
- 10.02.2016 – **The Washington Times**, Swiss researchers develop rescue drone that navigates forest trails better than a human [[Link](#)]
- 10.02.2016 – **Robohub**, Drones recognise and follow forest trails in search of lost people [[Link](#)]
- 10.02.2016 – **Popular Mechanics**, New Software Turns Drones into Bloodhounds that Could Track You Through the Woods [[Link](#)]
- 22.01.2016 – **Blick**, Was können Roboter heute eigentlich alles? [[Link](#)]

2015

- 21.09.2015 – **Futurezone**, "Wenn Drohnen mit eigenen Augen fliegen" [[LINK](#)]
- 15.04.2015 – **Robotics Business Review**, "Swiss Team Develops Self-Stabilizing Drones" [[Link](#)]
- 14.04.2015 – **IEEE Spectrum**, "You Can Launch This Quadrotor by Throwing It in the Air" [[Link](#)]
- 10.04.2015 – **Futura Sciences**, "Un drone qui se stabilise comme un funambule" [[Link](#)]
- 09.04.2015 – **De Ingenieur**, "Full-safe drone" [[Link](#)]
- 08.04.2015 – **Scientific Computing**, "New Technology Making Drones Safer and Smarter" [[Link](#)]
- 08.04.2015 – **Engadget**, "New technology keeps drones from crashing and burning" [[Link](#)]
- 07.04.2015 – **Gizmag**, "System allows hampered drones to regain control and land safely" [[Link](#)]

- 31.03.2015 – **Moneycab**, "Zürcher Forscher macht Drohnen zu 'Seiltänzern'" [[Link](#)]
- 30.03.2015 – **inside-it.ch**, "Zürcher Forscher rüsten Drohnen zu Luftakrobaten auf" [[Link](#)]
- 30.03.2015 – **Robohub**, "Quadrotor automatically recovers from failure or aggressive launch, without GPS" [[Link](#)]
- 16.03.2015 – **DailyMail**, "Palm-sized machines and self-flying vehicles go on display in Germany" [[Link](#)]
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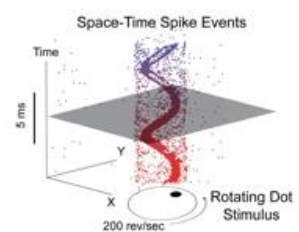
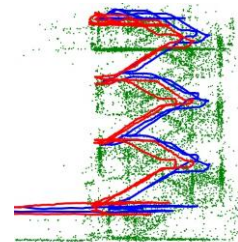
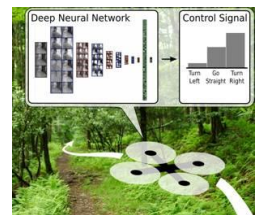
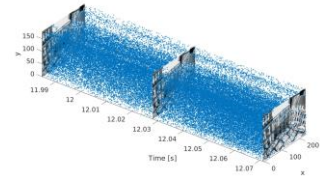
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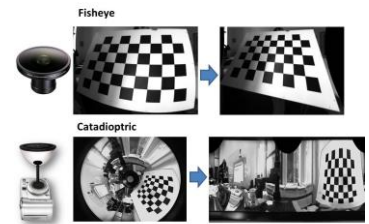
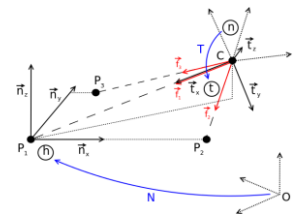
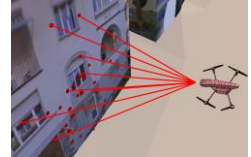
Open Source Software and Datasets

- 2016: [The Event Camera Dataset and Simulator](#) (C/C++, ROS)
- 2016: [Information Gain Based Active Reconstruction Framework](#) (C/C++, ROS)
- 2016: [Fisheye and Catadioptric Synthetic Datasets for Visual Odometry](#) (C/C++, ROS)
- 2016: [Forest Trail Dataset for Deep Neural Network Training](#) (C/C++, ROS)
- 2016: [REMODE: Regularized, Monocular Dense Reconstruction](#) (C/C++, CUDA, ROS)
- 2014: [SVO: Semi-direct Visual Odometry](#) (C/C++, ROS) – more than 20,000 downloads worldwide. Closed-source version available to companies.
- 2014: [ROS Driver and Calibration Tool for the Dynamic Vision Sensor \(event-based cameras, neuromorphic\)](#) (C/C++, ROS)

The Event-Camera Dataset and Simulator



- 2014: [A Monocular Pose Estimation System based on Infrared LEDs](#) (C/C++, ROS)
- 2013: [Torque Control of a KUKA youBot Arm](#) (C/C++, ROS) – Received KUKA Best Student Project Award
- 2013: [Dataset: Air-Ground Matching of Airborne images with Google Street View data](#) (C/C++, ROS)
- 2010: [Perspective 3-Point \(P3P\) Algorithm](#) – Currently part of the Open Source OpenGV library
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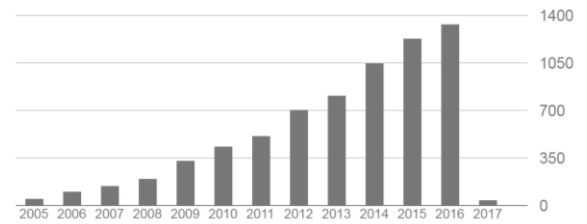


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Google Scholar Citation Indices

- **Total number of citations: ~7000**
- **H-index: 32**
- **i10-index: 56**
- My publications on "Google Scholar":
<http://scholar.google.com/citations?user=SC9wV2kAAAAJ&hl=en>
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