Davide Scaramuzza

Professor

Director of the Robotics and Perception Group

Department of Informatics
University of Zurich
Andreasstrasse 15, 2.10,
Zurich, 8050, Switzerland

Nationality:	Italian
Place of Birth:	Terni, Italy
Languages	Italian (native), English, French, German, Spanish
Homepage:	https://rpg.ifi.uzh.ch/people_scaramuzza.html
YouTube	https://www.youtube.com/ailabRPG
Google Scholar	scholar.google.com/citations?hl=en&user=SC9wV2kAAAAJ
Citations	> 38,000 - H-Index: 93 - H10 index: 204

Education

03/2005 - 02/2008 — **PhD in Robotics and Computer Vision, ETH Zurich**.
Advisor: Prof. Roland Siegwart. Reviewers: Luc Van Gool and Patrick Rives.
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.**
GPA: 30/30, Distinction: 110/110, *Summa Cum Laude and Dignity of Printing +*
Winner of the Federcomin Master Thesis Award, given by the Italian Minister of Innovation.

Academic Positions

09/2017 – Today — **Tenured Associate Professor of Robotics and Perception,**
Dep. of Informatics, University of Zurich
Director of the Robotics and Perception Group
Founder and Director of the Master in Artificial Intelligence at the University of Zurich

04/2019 – 6/2019 — **Visiting Associate Professor, Stanford University**
Hosts: Prof. Mac Schwager and Prof. Marco Pavone

02/2012 – 09/2017 — **Assistant Professor of Robotics & Perception, University of Zurich**

01/2011 – 01/2012 — **Post-doc and EU project coordinator. GRASP Lab, University of Pennsylvania**
Advisor: Prof. Vijay Kumar and Prof. Kostas Daniilidis

03/2008 – 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

Entrepreneurial Achievements

- **SUIND**: Safety device for commercial drones. Ongoing. Backed by Venture Kick, NCCR, and SNSF BRIDGE.
- **Zurich Eye**: Visual-inertial SLAM solutions for mobile robots. Now **Facebook-Meta-Oculus Zurich**.
- **Strategic Advisory** role at Dacuda, **now Magic Leap** Zurich.

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Other Academic Activities

- Director of the Robotics and Perception Group (since 2012)
- Founder and Director of the Master in Artificial Intelligence at the University of Zurich, Dep. of Informatics (since 2021)
- Teaching and Ph.D. committee at the University of Zurich, Dep. of Informatics (2018-2022)
- Head of the NCCR Rescue Robotics Grand Challenge (2017 to 2022).

My Research Team

My research team (the Robotics and Perception Group) currently consists of 9 Ph.D. students, 2 Postdocs, 1 engineer, and four research assistants. I also regularly host researchers from top research institutions (e.g., MIT, Caltech, INRIA, Max Planck), who stay for several months. Lab webpage: https://rpg.ifi.uzh.ch/

Paper Awards

2022 **NCCR Most Impactful Paper award** in 12 years for the RAL'16 paper on learning visual navigation in forests

2022 **IEEE RAL Best Paper Award** for the paper on drone flight despite rotor failure using onboard sensors

2021 **NASA Tech Briefs Award** for the paper on drone flight despite rotor failure using onboard sensors

2021 **IEEE Transactions on Robotics' Best Paper Award** finalist for the paper "Deep Drone Racing"

2020 **RSS Best Systems Paper Award** for the paper "AlphaPilot: Autonomous Drone Racing"

2020 **RSS Best Paper Award Finalist** for the paper "Deep Drone Acrobatics"

2019 **NASA Tech Briefs Award** for the RAL'19 paper "The Foldable Drone"

2019 **IEEE RAL Best Paper Award** finalist for the paper "Ultimate SLAM"

2019 **ICRA Workshop on SLAM Benchmarking Best Paper Award** for the paper on trajectory evaluation for SLAM

2018 **CORL Best System Paper Award** for the paper on deep drone racing

2018 **IEEE Transactions on Robotics' Best Paper Award** for the paper on on-manifold preintegration for VIO

2017 **IROS 2017 Paper Award finalist** in the category Rescue Robotics for the paper on rapid exploration

2017 **RSS' 17 Best Student Paper Award Finalist** for the paper on agile flight

2016 **IROS'16 Best Application Paper Finalist** for the paper on event-based feature tracking

2016 **BMVC'16 Best Industry Paper Award** for the paper on event-based multi-view stereo

2016 **AAAI'16 Best Video Award Finalist** for the RAL'16 paper on learning visual navigation in forests

2015 **Best Paper Award Finalist at RSS'15** for the paper on on manifold preintegration for VIO

Other Awards (ERC, career awards, industry awards, etc.)

2023 **IEEE Featured author**

2022 **1,000 World's Top Computer Scientists by research.com: Davide Scaramuzza** [link]

2021 **Aminer 100 Most Influential Robotics Scholar (world ranking: 14):** Davide Scaramuzza

2019 **ERC Consolidator Grant** (2 M EUR)

2019 **AlphaPilot Drone Racing World Championship**, 2nd place winner

2019 **Facebook Distinguished Faculty Award**

2019 Elevation to the degree of **IEEE Senior Member**

2019 **Drone Hero Contest 2019 –** EU's most innovative drone contest (for the foldable drone)

2018 **IROS Autonomous Drone Racing Competition**, 1st place winner

2018 **Intel Network of Intelligent System Award**

2018 **Qualcomm Innovation Award**

2017 **Misha Mahowald Prize** for Neuromorphic Engineering *for pathbreaking applications of event cameras to robotics*

2017 **Intel Network of Intelligent System Award**

2017 **EU Robotics Transfer Award with Fotokite**

2016 **Qualcomm Innovation Award**

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2014 **ERC-SNSF Starting Grant** (1.6 M EUR)

2014 **IEEE Robotics and Automation Early Career Award** for *contributions to robot vision and vision-based drones*

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

2014 **Google Faculty Research Award** (1st time outside of USA in robotics)

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

2010 **George Giralt PhD Award** finalist, 2010 - Sponsored by EuRobotics

2009 **ROBOTDALEN Best PhD Thesis Award in Robotics** (20k EUR). Sponsored by EU, IEEE, ABB, and VOLVO.

2009 **European Micro Aerial Vehicle competition (EMAV)**, 2nd place winner – TU Delft

2005 **FEDERCOMIN-Aica** Italian Best Master Thesis Award, (5k EUR), given by the Italian Minister of Innovation.

2004 **Ternana Opera Educatrice** - (800 Euros in prize money) as best Master student in his home University

1998 **Italian Mathematical Olympiads**, finalist Umbria region, Italy. Participated in the national competition.

Promotion by the President of the University of Zurich

Six consecutive promotions by the UZH rectors Andreas Fischer, Michael Hengartner, Michael Schaepman in 2013, 2014, 2015, 2018, 2020, 2021 for outstanding achievements.

Promotion of Young Researchers

2022 **Czech Science Foundation's Junior Star Award** to Dr. Robert Penicka (1 M Euros, equivalent to ERC)

2022 **NCCR Robotics Best Master thesis award** to Michelle Rueeg

2022 **Georges Giralt Best PhD Thesis Award** (winner) to Antonio Loquercio

2021 **Georges Giralt Best PhD Thesis Award** finalist to Zichao Zhang

2021 **UZH Annual Award to Dr. Zichao Zhang** for best PhD dissertation

2021 **UZH FAN Award** (100k CHF) to Dr. Christian Pfeiffer

2021 **UZH Forschungskredit** (60k CHF) to Mathias Gehrig

2020 **ETH Medal** to Tim Taubner for his Master Thesis

2019 **ETH Medal** to Daniel Gehrig for his Master Thesis

2020 **Georges Giralt Best PhD Thesis Award** finalist to Henri Rebecq

2019 **Dr. Guillermo Gallego appointed Faculty at TU Berlin**

2019 **AlphaPilot Drone Racing World Championship**, 2nd place winner

2019 **UZH Forschungskredit** (60k CHF) to Titus Cieslewski

2018 **Qualcomm Innovation Award** (40k USD) to Henri Rebecq

2018 **Georges Giralt Best PhD Thesis Award** finalist to Christian Forster

2016 **ETH Fritz-Kutter ETH Award** (10k CHF) to Timo Horstschaefer

2016 **Qualcomm Innovation Award** (40k USD) to Ellias Mueggler

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

2014 **ETH Fritz-Kutter ETH Award** (10k CHF) to Basil Huber

2014 **UZH Forschungskredit** (60k CHF) to Christian Forster

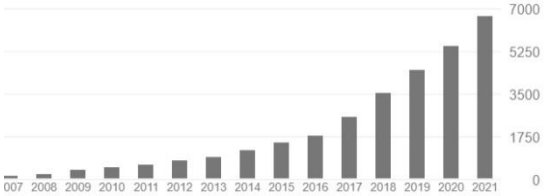
2014 **UZH Forschungskredit** (100k CHF) to Dr. Reza Sabzevari

2013 **KUKA Best Student Project Award 2013** to Benjamin Keiser

TEDx Talk - 2012 - Swiss National TV studios: https://youtu.be/KQpKQXU7dkM

Citation Indices

Total number of citations on Google Scholar: > 38,000
Scholar H-index: 93
Scholar i10-index: 204
http://scholar.google.com/citations?user=SC9wV2kAAAAJ&hl=en



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Teaching Activities

2022 - today	University of Zurich, “Machine Learning - an Interdisciplinary Introduction”, 60 students.
2016 - today	ETH and University of Zurich, “Vision algorithms for mobile robotics”, Master’s. 200 students.
2018 - today	University of Zurich, “Foundations of Computing I”, 1st year Bachelor’s. 300 students
2018 - today	University of Zürich, Certificate of Advanced Study (CAS) – Block course on Mobile Robotics
2015 - today	Hochschule für Wirtschaft Zürich, CAS, – Block Course on Mobile Robotics
2017 - 2021	Basics of Instrumentations and Measurements, Master’s, 50 students
2014 – today	edX course “Autonomous Mobile Robots” over 100,000 registrations.
2013 – 2015	University of Zurich, “Fundamentals of Computer Vision and Image Processing”
2012 – 2015	ETH / UZH Co-Lecturer of the Masters course “Autonomous Mobile Robots”
2008 – 2010	ETH, Co-Lecturer of the Masters course “Autonomous Mobile Robots”
2006	EPFL, Teaching Assistant for the course on C++ Programming
2005	EPFL, Teaching Assistant for the course on C++ Programming

Invited speaker (conferences, workshops, summer schools)

2023

1. Embodied AI Conference, March 22-24, 2023 (**keynote speaker**) (virtual)

2022

2. CORL’22 workshop on Learning to Adapt and Improve in the Real World, Dec. 15, 2022 (**keynote speaker**) (virtual)
3. IEEE Int. Electronic Conf. on Computer and Knowledge Eng., Mashhad, Iran, Nov. 18, 2022 (**keynote speaker**) (virtual)
4. IROS’22 workshop on Agile Robotics: Perception, Learning, and Control, Oct. 27, 2022 (**keynote speaker**) (virtual)
5. Latin American Robotics Symposium (LARS) 2022, Oct. 21, 2022 (**keynote speaker**) (virtual)
6. CominLabs Days, Rennes, France, Oct. 11, 2022, virtual, (**keynote speaker)**
7. Workshop on Embedded Optimization and Learning for Robotics, Freiburg, Oct. 11, 2022, (**keynote speaker)**
8. Maker Faire Rome, Italy, Oct. 7, 2022, (**keynote speaker**)
9. 15th APCA Int. Conf. on Automatic Control and Soft Computing (CONTROLO), July 8, 2022 (**keynote speaker**)
10. HUAWEI Machine Learning and Computer Vision workshop, Zurich, July 7, 2022 (**keynote speaker**)
11. Neuromorphic Engineering Workshop Telluride Future Forum Technology, July 1, 2022, virtual (**keynote speaker**),
12. MED’22 workshop on Active Vision Methods in Autonomous Navigation, Jun. 28, 2022 virtual (**keynote speaker**)
13. RSS’22 Workshop on Learning from Diverse Online Data, Jun. 27, 2022 virtual (**keynote speaker**)
14. Machine Learning Summer School (BAYOYO), Istanbul, Turkey, Jun. 27, 2022, virtual (**keynote speaker**)
15. CVPR’22 Workshop on Visual Odometry Based on Location Clues, Jun. 19, 2022 virtual (**keynote speaker**)
16. Virtual and Augmenter Reality Summer School (IVAR), June 14, 2022 virtual (**keynote speaker**)
17. International Congress on Photogrammetry and Remote Sensing (ISPRS), Jun. 8, 2022 (**keynote speaker**)
18. ICRA’22 workshop on Behaviour Priors in Reinforcement Learning for Robotics, May 27, 2022 (**keynote speaker**)
19. ICRA’22 workshop on Aerial Robotics, May 23, 2022 (**keynote speaker**)
20. Drone Show Korea, Feb. 25, 2022 (virtual) (**keynote speaker**)
21. Robohub Podcast on Event cameras with Abate De Mey, Jan. 28, 2022. virtual

2021

22. IEEE RSI 9 th International Conference on Robotics and Mechatronics, Nov. 2021, Iran, virtual (**keynote speaker**)
23. 2021 International Joint Conference on Robotics and Artificial Intelligence, Nov., 2021, China, virtual (**keynote speaker**)
24. Conference on Robot Learning (CORL), November, 2021 (**keynote speaker**)
25. IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR), October 2021 (**plenary speaker**)
26. 21st Int. Conf. on Control, Automation and Systems (ICCAS), October 2021 (**plenary speaker**)
27. United Nations Environment Program, Drones for search and rescue, October 2021 (**keynote speaker**)
28. House of Switzerland, Stuttgart (**keynote speaker**)
29. ETH Workshop on AI in the Sciences and Engineering, Sep. 28, 2021 (**keynote speaker**)
30. IEEE Int. Conference on Multisensor Fusion and Integration (MFI), Karlsruhe, Sep. 2021 (**plenary speaker**)
31. Automatica, Munich, June 22, 2021 (**keynote speaker**)
32. CVPR’21 workshop on Image Matching: Local Features and Beyond, June 25, 2021 (**keynote speaker**)
33. CVPR’21 workshop on Egocentric Perception, Interaction and Computing, June 20, 2021 (**keynote speaker**)
34. CVPR’21 workshop on Large Scale Computer Vision for Remote Sensing Imagery, June 19, 2021 (**keynote speaker**)
35. ICRA’21 workshop on “Perception and Action in Dynamic Environments”, June 4, 2021, virtual (**keynote speaker**)
36. ICRA’21 workshop on “On- and Near-sensor Vision Processing”, June 4, 2021, virtual (**keynote speaker**)
37. Workshop on Ethics of Humanitarian Drones, June 2, 2021, Geneva (**keynote speaker**)

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38. ICRA'21 workshop on "Opportunities and Challenges with Autonomous Racing", May 31, 2021, virtual (**keynote speaker**)
39. ICRA'21 workshop on "Resilient and Long-Term Autonomy for Aerial Robots", May 31, 2021, virtual (**keynote speaker**)
40. ICRA'21 workshop on "Robust Perception for Autonomous Field Robots", May 31, 2021, virtual (**keynote speaker**)
41. Workshop on Ethics of Humanitarian Drones, March 23, 2021, virtual (**keynote speaker**)
42. Intel Neuromorphic Workshop, Feb. 09, 2021, virtual (**keynote speaker**)
43. 21st International Conference on Control, Automation and Systems (ICCAS 2021), (**plenary speaker**)
44. AIAA Session on AlphaPilot AIRR Autonomous Drone Race competition, Jan. 11, 2021, virtual (**plenary speaker**)

2020

45. RoboVis, Australia, November 25, 2020, virtual (**keynote speaker**)
46. Huawei smart camera workshop, November 20, 2020, virtual (**keynote speaker**)
47. Robotics Today Seminar Series, November 13, 2020, virtual (**keynote speaker**)
48. United Nations, Technology Development workshop, November 11, 2020, virtual (**keynote speaker**)
49. 25th International Humanitarian & Security Conference, October 2, 2020, Geneva (**keynote speaker**)
50. Brazilian Conference on Mechatronics, September 30, 2020, virtual (**keynote speaker**)
51. German Conference on Pattern Recognition (DAGM), September 28, 2020, virtual (**keynote speaker**)
52. Huawei Video Summit, September 10, 2020, virtual (**keynote speaker**)
53. Irish Machine Vision Conference, August 31, 2020, virtual (**keynote speaker**)
54. ECCV'20 Embedded Vision Workshop, August 28, 2020, virtual (**keynote speaker**)
55. ECCV'20 UAVision Workshop, August 28, 2020, virtual (**keynote speaker**)
56. ECCV'20 4D Vision, August 23, 2020, virtual (**keynote speaker**)
57. Dronitaly, July 16, 2020, virtual (**keynote speaker**)
58. ICRA'20 Workshop on Perception, Action, Learning, June 11, 2020, virtual (**keynote speaker**)
59. Computer Vision Summer School, Udine, June 29, 2020, virtual (**keynote speaker**)
60. Event-based Camera Workshop, June 16, 2020, virtual (**keynote speaker**)
61. CVPR'20 OmniVision Workshop, June 15, 2020, virtual (**keynote speaker**)
62. ICRA'20 Workshop on the Debates on the Future of Robotics Research, June 5, 2020, virtual (**keynote speaker**)
63. ICRA'20 Workshop on Unconventional Sensors in Robotics, June 4, 2020, virtual (**keynote speaker**)

2019

64. IROS'19 Workshop "Visual Inertial Navigation", November 8, 2019, (**keynote speaker**)
65. IROS'19 Workshop "Vision-based Drones", November 8, 2019, (**keynote speaker**)
66. IROS'19 Workshop "Towards Cognitive Vehicles", November 8, 2019 (**keynote speaker**)
67. International Micro Aerial Vehicle Conference, Madrid, October, 2019 (**keynote speaker**)
68. International Conference on Image Analysis and Processing, Trento, September, 2019. (**keynote speaker**)
69. Smart Maintenance Conference, Zurich, September, 2019. (**keynote speaker**)
70. Field and Service Robotics Conference, Tokyo, August, 2019. (**keynote speaker**)
71. International Computer Vision Summer School (ICVSS), Sicily, July, 2019. (**keynote speaker**)
72. International Conference on Advances in Robotics conference, Madras, July, 2019. (**keynote speaker**)
73. RSS Workshop on "Scene understanding for self-driving cars", Freiburg, June, 2019. (**keynote speaker**)
74. RSS Workshop on "Perception and Control for Fast and Agile Super-vehicles", Freiburg, June, 2019. (**keynote speaker**)
75. RSS Workshop on "Challenges in aerial physical interaction", Freiburg, June, 2019. (**keynote speaker**)
76. ICRA'19 Workshop "Learning in-the-Loop Systems in Autonomous Flight", 2019. (**keynote speaker**)
77. ICRA'19 Workshop "Reproducible Research in Robotics", Montreal, Canada, May, 2019. (**keynote speaker**)
78. ICRA19 Workshop "MATLAB and Simulink for Robotics Research", Montreal, Canada, May, 2019. (**keynote speaker**)
79. ICRA19 Workshop "The Future of Aerial Robotics", Montreal, Canada, May, 2019. (**keynote speaker**)
80. ICRA19 Workshop "Benchmarking of SLAM Algorithms", Montreal, Canada, May, 2019. (**keynote speaker**)
81. United Nations, expert group on New Trends and Technologies, Geneva, April, 2019. (**keynote speaker**)

2018

82. CNRS Journees National de la Robotique, Nov. 21, 2018 (**keynote speaker**)
83. Robotics Research in Switzerland, Kilometro Rosso, Bergamo, Nov. 13, 2018, Italy (**keynote speaker**)
84. IROS18 Workshop on Unconventional Sensing and Processing, Oct. 5, 2018 (**keynote speaker**)
85. IROS18 Workshop on Vision-based Drones: What's next? Oct. 5, 2018
86. INTEL NIS Workshop, Munich, Sep. 4-5, 2018 (**keynote speaker**)
87. 2nd International Symposium on Aerial Robotics, Jun 11-12, 2018, Philadelphia, USA (**keynote speaker**)
88. ISPRS18 TC II Symposium Towards Photogrammetry 2020, Italy, Riva del Garda, Jun. 4, 2018 (**plenary speaker**)
89. ICRA18 Workshop on The interplay between optimal estimation, Brisbane, May 25, 2018 (**keynote speaker**)
90. ICRA18 Workshop on Aerial Robotic Inspection and Maintenance, May 25, 2018 (**keynote speaker**)
91. ICRA18 Workshop on Human Robot Interaction with UAVs, Brisbane, May 21, 2018 (**keynote speaker**)
92. ICRA18 Workshop on Reproducible Research in Robotics, Brisbane, May 21, 2018 (**keynote speaker**)
93. IST Austria's Young Scientists Symposium, IST, Vienna, May 4, 2018 (**plenary speaker**)
94. SPIE conference, Orlando, April, 2018 (**keynote speaker**)

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95. ERF18 Workshop on Aerial Robotics for Industrial Inspection, Tampere, Mar., 2018 (**keynote speaker**)
96. Winter Computer Vision Workshop, Prague, Feb. 2018, (**keynote speaker**)

2017

97. ICCV Workshop on UAV Vision, Venice, Italy, Oct. 2017, (**keynote speaker**)
98. ICCV Workshop on Visual Object Tracking Challenge, Venice, Italy, Oct. 2017, (**keynote speaker**)
99. ICCV Workshop, Role of Simulation in Computer Vision, Venice, Italy, Oct. 2017 (**keynote speaker**)
100. 3DV 2017 conference, Qingdao, China, Oct. 2017, (**keynote speaker**)
101. IROS workshop on vision controlled UAVs, Vancouver, Canada, Sep. 2017, (**keynote speaker**)
102. Microsoft Research invited talk, Microsoft Research Headquarters, Seattle, USA, Sep. 2017
103. Amazon invited talk (Amazon headquarters), Seattle, USA, Sep. 2017
104. International Conference on UAV in Geomatics, Bonn, Germany, Sep. 2017 (**keynote speaker**)
105. European Conference on Mobile Robots, Paris, Sep. 2017 (**plenary speaker**)
106. Intel Network of Intelligent Systems Workshop, Aug. 2017 (**keynote speaker**)
107. Cooperative Dynamic Simultaneous Localization and Mapping, Zagreb, Croatia, Sep. 2017 (**keynote speaker**)
108. Workshop on Computer Vision in Vehicle Technology, CVPR'17, Honolulu, July, 2017 (**keynote speaker**)
109. BMVA Summer School, Lincoln, UK, June, 2017
110. Swiss Post Annual IT conference (700 people), Bern, Switzerland, 2017 (**keynote speaker**)
111. Workshop on Multi-Robot Perception-Driven Control and Planning, ICRA'17, Singapore, June, 2017 (**keynote speaker**)
112. Workshop on Reproducible Research in Robotics, ICRA'17, Singapore, June, 2017 (**keynote speaker**)
113. Neuromorphic Engineering Workshop, Capocaccia, Italy, Apr. 2017
114. European Robotics Forum, Edinburgh, UK, Mar. 2017
115. Mohammed bin al Zayed competition, Abu Dhabi, Emirate, Mar. 2017
116. Australian Robotic Vision Summer School, Canberra, March, 2017 (**keynote speaker**)

2016

117. NCCR Robotics Industry Day, Zurich, November, 2016 (**keynote speaker**)
118. IEEE IROS'16 Tutorial on Visual SLAM, Daejeon, South Korea, October, 2016 (**keynote speaker**)
119. IEEE Colombian Conference on Robotics and Automation, Bogota, September, 2016 (**keynote speaker**)
120. 14th International Conference on Intelligent Systems, Shanghai, July, 2016 (**plenary speaker**)
121. 20th Robocup Symposium, Leipzig, July 2016 (**keynote speaker**)
122. Machine Intelligence Summit, Berlin, June 2016 (**keynote speaker)**
123. SHERPA summer school, June, Trento, Italy 2016
124. Tutorial on Micro Aerial Vehicles, Int. Conference on Robotics and Automation, ICRA16, Stockholm
125. University of Sao Paulo, Brazilian Symposium on Robotics and Mechatronics, May, 2016 (**plenary speaker**)

2015

126. Dagstuhl School on Vision for Autonomous Vehicles, November, 2015
127. International Workshop on Software Engineering for Resilient Systems, Paris, September, 2015 (**keynote speaker**)
128. Int. Conference on Intelligent Robotics and Applications, Portsmouth, UK, August, 2015 (**plenary speaker**)
129. Armasuisse UAV workshop, Thun, July, 2015
130. IEEE Italy Section Summer School, Perugia, June, 2015.
131. Int. Workshop on "The problem of mobile sensors: setting future goals and indicators for SLAM", RSS'15, May, 2015
132. Innorobo, Workshop on "Towards Robust and Safe Autonomous Drones", Lyon, July, 2015. (**keynote speaker**)
133. International Workshop on "Scaling up active perception", ICRA'15, Seattle, May, 2015
134. International Workshop on Neuromorphic Sensing, ICRA'15, Seattle, May, 2015
135. International Workshop on Taxonomy of Interconnected Systems, ICRA'15, Seattle, May, 2015
136. Armasuisse Workshop on Multi-agent systems, Thun, May 2015.
137. Computer vision Winter workshop, Graz, February 2015 (**keynote speaker**)
138. Workshop on Future UAS Technologies, Thun, Switzerland, Jan. 2015

2014

139. Int. Summer School on Cooperation of Robots and Sensor Networks, TU Darmstadt, Sep. 2014 (**keynote speaker**)
140. 3rd Int. Workshop on Visual Control of Mobile Robots (IROS'14), Chicago, Sep. 2014
141. Int. Workshop on Aerial Open Source Robotics (IROS'14), Chicago, Sep. 2014
142. Int. Workshop on Transducers for robot autonomous navigation, Benevento, Italy, Sep. 2014 (**keynote speaker**)
143. International Data Fusion and Big Data Workshop, Thun, ArmaSuisse, Switzerland, August 2014
144. 3rd Workshop on Integration of Planning and Perception for MAVs (RSS'14), Berkley, July, 2014 (**keynote speaker**)
145. 2nd International workshop on Multi-Unmanned Vehicle Systems (**keynote speaker**), Compiegne, France, July, 2014
146. 12th Int. Workshop on Non-Classical Cameras, Camera Networks and Omnid. Vision (ICRA"14), Hong Kong, June, 2014.
147. International Workshop on Robotic Sensor Networks (**keynote speaker**), Berlin, April, 2014

2013

148. 5th Workshop on Planning, Perception and Navigation for Intelligent Vehicles (IROS'13), (**keynote speaker**)
149. French National Robotics Days (Journees Nationales de la Recherche en Robotique), Annecy, Oct., 2013
150. 4th JRC ECML Workshop on Unmanned Aerial Systems for Rapid Mapping, Geneva, September, 2013
151. Workshop on "Towards a Swiss Robotic Rescue Team" (**keynote speaker**), (ICRA'13), 2013

2012

152. TEDx Zurich, Oct. 25, 2012
153. AIROBOTS Summer School on Micro Aerial Vehicles, Zurich, July 2012.
154. Workshop on "Open problems and challenges in aerial robotics Europe", (RSS'12), (**keynote speaker**), 2012

2008 – 2011

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

Invited seminars

1. Johns Hopkins University, December 1, 2022. Virtual
2. European Space Agency, Nov. 24, 2022.(virtual)
3. Italian Institute of Technology, October 6, 2022. Virtual
4. General Motors Israel, June 7, 2022. Virtual.
5. UZH Foundation, May 20, 2022.
6. ETH EFCL seminar, Mar. 16, 2022.
7. CMU Tartan workshop, October 21, 2021, virtual
8. Harbin Institute of Technology, July, 2021, virtual
9. Huawei summit, June 25, 2021, virtual
10. University of Toronto, May 14, 2021, virtual
11. UC Berkeley, May 7, 2021, virtual
12. University of Pennsylvania, GRASP ON seminar series, April 23, 2021, virtual
13. EMPA, April 23, 2021, virtual
14. DSI Digital Society Initiative, Feb. 08, 2021, virtual
15. AMS invited talk, Austria, Jan. 26, 2021, virtual
16. DJI invited talk, Shenzen, Jan. 11, 2021, virtual
17. University of Zaragoza, October 28, 2020, virtual
18. Universita' Politecnica delle Marche, April 15, 2020, virtual
19. Max Planck Institute, Tubingen, Bernstein Lectures, November 14, 2019
20. BOSCH AI seminar, Renningen, Sep. 5, 2019
21. Intel Madras, July 4, 2019
22. IIT Madras, July 2, 2019
23. Stanford University, May 17, 2019.
24. Nuro, Intel, Skydio, Aeye, May, 2019
25. UC Berkeley, May 6, 2019.
26. University of Maryland, October, 26, 2018
27. Khalifa University, Abu Dhabi, Sep. 17, 2018
28. MIT, Media Lab, virtual, July 10, 2018
29. Princeton University, April 16, 2018
30. University of Southern Denmark, April, 2018
31. Georgia Tech Atlanta, Sep. 2017
32. CMU Robotics Institute Seminar Series, February, 2017

33. Universidad Pontificia de Bogota, September, 2016.
34. USP Sao Paulo (inviter Prof. Dr. Marcelo Becker), May 2016
35. Qualcomm, Vienna, October. 2015
36. MIT, (inviter Andrea Censi) May, 2015
37. Indian Institute of Technology at New Delhi, Allahabad, and Kanpur (inviter SwissNex India), March 2015.
38. University of Zaragoza (inviter Prof. Jose Neira), Dec. 2014
39. University of Naples Federico II (inviter Prof. Bruno Siciliano), Sep, 2014
40. ETH Computer Vision Lab (inviter Prof. Luc Van Gool), August, 2014
41. Carnegie Mellon University (inviter Prof. Sanjiv Singh), July 2014.
42. Polytechnique of Torino (inviter Prof. Marcello Chiamberge), July 2014
43. Advanced Center for Aerospace Technologies and University of Seville (inviter Prof. Anibal Ollero), September 2013.
44. USC Viterbi School of Engineering, Los Angeles (inviter Prof. Gaurav Sukhatme), March 2012.
45. EPFL Lausanne, (inviter Prof. Dario Floreano and Prof. Auke Ijspeert), March, 2011.
46. University of Zurich, (inviter Prof. Rolf Pfeifer), February, 2011.
47. Invited talk at the „Einführungstag für Master-Studierende" (inviter Rector of ETH Zurich), September 2010.
48. Dynamic maps seminar (inviters Prof. Marc Pollefeys), Dagstuhl, 2010.
49. GRASP Lab, University of Pennsylvania (inviters Prof. Kostas Daniilidis and Profl. Vijay Kumar, July, 2010
50. Italian National Center of Research (CNR), Bari, July, 2010.
51. NASA Jet Propulsion Laboratory (JPL), (inviter Dr. Larry Matthies), Pasadena, US, May, 2010.
52. University of California Los Angeles (UCLA), (inviter Prof. Stefano Soatto), Vision Lab, US, May, 2010
53. Caltech, NESS seminar series, (inviter Prof. Pietro Perona), US, May, 2010
54. University of Southern California (USC), (inviter Prof. Gaurav Sukhatme), Los Angeles, US, May, 2010.
55. Stanford University, Artificial Intelligence Lab, (inviter Prof. Oussama Khatib), US, May, 2010.
56. Willow Garage, Menlo Park, (inviter Dr. Kurt Konolige), US, May, 2010.
57. Technical University of Crete, Chania, (inviter Prof. Dimitrios Rovas) Greece, April, 2010.
58. Department of Information Engineering, (inviter Prof. Emanuele Menegatti), University of Padua, 2010.
59. Caltech, Computational Vision Lab (inviter Prof. Pietro Perona), Pasadena, CA, November 6, 2007.
60. Department of Information Processing and Electronics, (inviter Prof. Paolo Valigi) University of Perugia, 2007.
61. INRIA, Grenoble, (inviter Prof. Christian Laugier), Grenoble, France, January, 2007.
62. 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

1. "4th Workshop on Event-based Vision", CVPR'23, 2023
2. Autonomous Drone Racing competition and workshop, ICRA'23, May, 2023.
3. "Learning for Agile Robotics", CORL'22, Dec. 15, 2022
4. "Agile Robotics: Perception, Learning, Planning, and Control", IROS'22, Oct. 23-27, 2022
5. "DodgeDrone Challenge" ICRA'22, May 27, 2022.
6. "Releasing Robots into the Wild: Simulations, Benchmarks, and Deployment", ICRA'22, May 27, 2022.
7. "Integrated Perception, Learning, and Control for Agile Super Vehicles", IROS'21, October, 2021.
8. "Perception and Action in Highly-Dynamic Environments", ICRA'21, virtual, June 4, 2021
9. "3rd Workshop on Event-based Vision", CVPR'21, virtual, June 19, 2021
10. "Machine Learning for Mobile Robot Navigation in the Wild", AAAI'21, virtual, Mar. 22-24, 2021
11. "Workshop on Perception, Learning, and Control for Autonomous Agile Vehicles", IROS'20, Nov. 2-3, 2020
12. "Workshop on Perception and Control for Fast and Agile Super-Vehicles", RSS'20, Las Vegas, July 12, 2020
13. "Computer Vision for UAVs", ECCV, Glasgow, August 28. 2020
14. "Challenges in Vision-based Drone Navigation", IROS, Macau, Nov. 8, 2019
15. "2nd International Workshop on event-based Vision and Smart Cameras", CVPR, Long Beach, CA, June 17, 2019
16. "3rd International Workshop on Computer Vision for UAVs", CVPR, Long Beach, CA, June 16, 2019
17. "Vision-based Drones: What's next?", IROS, Madrid, Oct. 2018
18. "2nd International Workshop on Computer Vision for UAVs", ECCV, Munich, Sep. 2018
19. "Computer Vision for UAVs", ICCV, Venice, October, 2017
20. "Vision-based Agile Autonomous Navigation of UAVs", IROS, Vancouver, Canada, Sep., 2017
21. "1st International Workshop on Event-based Vision", ICRA, Singapore, June 2, 2017
22. "Vision-based High Speed Autonomous Navigation of UAVs", IROS, Daejeon, South Korea, October, 2016
23. "Vision-based Control and Navigation of Small, Light-Weight UAVs", IROS, Hamburg, Germany, October, 2015.
24. "Innovative Sensing for Robotics: Focus on Neuromorphic Sensors", ICRA, Seattle, USA, May, 2015
25. "Computer Vision in Vehicle Technology with Special Session on Micro Aerial Vehicles", ECCV, Zurich, Switzerland, 2014
26. "Omnidirectional Vision, Camera Networks and Non-Classical Cameras, ICRA, Hong Kong, China, May, 2014

27. “Vision-based Control and Navigation of Micro Helicopters in GPS-denied Environments”, IROS, Tokyo, Japan, Oct., 2013
28. “Micro-UAV Perception and Control”, ICRA, Shanghai, China, May, 2011

Postdoc Supervision

Current postdocs:

1. Marco Cannici, PhD at Poli Milano
2. Christian Pfeiffer PhD at EPFL

Past postdocs and where they are now:

1. Robert Penicka, PhD with Martin Saska at TU Prague, now group leader at TU Prague
2. Sihao Sun, PhD with Coen de Visser and Q. Chu at TU Delft, now postdoc at TU Delft
3. Javier Hidalgo, PhD with Udo Frese at ESA and Uni Bremen, now Magic Leap Zurich
4. Dimche Kostadinov, PhD with Slava Voloshynovskiy at Uni Geneva, now at SONY AVS Zurich
5. Dario Brescianini, PhD with Raffaello D’Andrea at ETH, now at SONY AI Zurich
6. Jeffrey Delmerico, PhD with Jason Corso at Uni Michigan, now at Microsoft Research Zurich
7. Guillermo Gallego, PhD with Antony Yezzi at Georgia Tech, now Professor at TU Berlin
8. Peng Lu, PhD with Coen de Visser and Q. Chu at TU Delft , now Professor at Uni Hong Kong
9. Suseong Kim, PhD with Jin Kim at Seoul National University, now at Electronics and Telecom Research Institute (ETRI)
10. Manuel Werlberger, PhD with Thomas Pock at TU Graz, co-founder of Zurich Eye, now at Meta Zurich
11. Sergei Lupashin, PhD with Raffaello D’Andrea at ETH, founder of Fotokite, now at NVIDIA Zurich
12. Matia Pizzoli, PhD with Fiora Pirri at La Sapienza Uni Rome, co-founder of Zurich Eye, now at Meta Zurich
13. Andras Majdik, PhD at Uni Cluj-Napoca, now at Hungarian Inst. Of Computer Science and Control
14. Reza Sabzevari, PhD with Alessio del Bue at Italian Institute of Technology, now at BOSCH Hildesheim

PhD student Supervision

Current PhD students at my lab at the University of Zurich:

1. Daniel Gehrig
2. Mathias Gehrig
3. Manasi Muglikar
4. Yunlong Song
5. Giovanni Cioffi
6. Nico Messikommer
7. Angel Romero
8. Leonard Bauersfeld
9. Drew Hanover

Current PhD students co-supervised at ZHAW:

10. Banafshe Bamdad, student of Alireza Darwishy
11. Fatemeh Mohammadi, student of Hans Wernher van de Venn
12. Maryam Rezayati, student of Hans Wernher van de Venn

Current PhD students co-supervised at Balgrist:

13. Jecklin Sascha, student of Philipp Fürnstahl

Graduated PhD students, their PhD thesis reviewers, and where they are now:

1. 2022 – Elia Kaufmann. Reviewers: Angela Schoellig, Vijay Kumar, Wolfram Burgard, Sertac Karaman. Now at Skydio
2. 2021 – Philipp Foehn. Reviewers: Moritz Diehl, Luca Carlone, Roland Siegwart. Now at Skydio
3. 2021 – Antonio Loquercio. Reviewers: Pieter Abbeel, Angela Schoellig, Roland Siegwart. Now postdoc at UC Berkeley
4. 2020 – Zichao Zhang. Reviewers: Frank Dellaert, Michael Kaess, Timothy Barfoot. Now at Chinese Academy of Sciences
5. 2020 – Titus Cieslewski. Reviewers: Torsten Sattler, Marc Pollefeys. Now at Verity AG
6. 2019 – Henri Rebecq. Reviewers: Andrew Davison, Bernt Schiele, Tobi Delbruck. Now at Google Zurich
7. 2019 – Davide Falanga. Reviewers: Nathan Michael, Sami Haddadin, Roland Sigewart. Now at Skydio
8. 2018 – Matthias Faessler. Reviewers: Antonio Franchi, Anibal Ollero. Now at Verity AG
9. 2017 – Elias Mueggler. Reviewers: Tobi Delbruck, Kostas Daniilidis. Now at Meta Reality Labs
10. 2016 – Christian Forster. Reviewers: Stefan Leutenegger, Marc Pollefeys. Co-founder of Zurich Eye, now at Meta Zurich

Graduated co-Supervised PhD students

- Frederike Duembgen at EPFL, student of Martin Vetterli
- During my postdoc at UPenn**:** Roy Anati. Student of Kostas Daniilidis, now at Google Mountain View
- During my postdoc at ETH Zurich:
    - Laurent Kneip, student of Roland Siegwart, now Prof. at Shanghai Tech
    - Markus Achtelik, student of Roland Siegwart, now CTO of Auterion
    - Stephan Weiss, student of Roland Siegwart, now Prof. at Uni Klagenfurt

Master and Bachelor Student Supervision

>200 students. The full list can be found at the bottom of this page: http://rpg.ifi.uzh.ch/people.html

Membership networks

- Associate Faculty of the ETH AI Center (Since 2021)
- Core member of the UZH Digital Society Initiative (DSI) at the University of Zurich (since 2018)
- Core member UZH Space Hub (since 2020)
- Core member of the UZH Innovation Hub (since 2020)
- Core member of Intel Neuromorphic Research Community (since 2020)
- Core Member of NCCR (National Center of Competence in Research) Robotics and
- Former Associate Faculty of Wyss Zurich (2015-2016)
- Member of the IEEE Robotics and Automation Society (since 2010)

Chair or Member of Professor Hiring Committees

1. 2023 – UZH Open Rank Professorship on AI for Cyber Physical Systems, **Chair of the committee**
2. 2023 – UZH Assistant Professorship in Genetics of Language, Evolutionary Biology and Environmental Studies
3. 2019 – UZH Assistant Professorship in Big Data Science
4. 2019 – UZH Assistant Professorship in AI and Machine Learning
5. 2019 – ETH Assistant Professorship in Robotics
6. 2019 – UZH Professorship committee for the PaP appointment of Prof. Jetzer
7. 2019 – UZH Professorship in Empirical Economics / Empirical Policy Analysis
8. 2016 – UZH Professorship on Child and Welfare Development (UNICEF)
9. 2016 – UZH Professor in Development Economics
10. 2014 – UZH Professor in Neuroeconomics

Journal Associate Editor

- 2014 – 2018: Associate Editor for the IEEE Transactions on Robotics.

Journal guest editor

1. 2019 – Journal of Field Robotics, special issue on “Future Challenges and Opportunities in Vision-based Drone Navigation”
2. 2018 – Journal of Field Robotics, special issue on “High-Speed Vision-Based Autonomous Navigation of UAVs”
3. 2018 – Frontiers Journal, special issue on "Neuromorphic Sensory Functions in Neuro-robotics and Bionics and the Underlying Biological Processes"
4. 2018 – Autonomous Robots journal, special issue on “Active Perception”
5. 2017 – Journal of Field Robotics, special issue on “High-Speed Vision-Based Autonomous Navigation of UAVs”
6. 2012 – Autonomous Robots journal, special issue on “Micro UAV, Perception and Control”

Journal Advisory Board

2012 – Today – International Journal on Robotics Research, EiC: Antonio Bicchi

IEEE Technical Committee on Robot Vision

2018 to 2021 - Chair of the IEEE Robotics and Automation Society Technical Committee on Robot Vision

Conference services

- Local chair of CORL’18
- Demo Chair of ECCV’14
- Editor of ICRA’19-20-21
- Associate Editor of ICRA’12-17 and IROS’13-17
- Session Chair: ICRA’12-17 and IROS’13-18

Project Proposal Reviewer

- ERC (European Research Council)
- SNSF (Swiss National Science Foundation)
- ETH Grants

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- Agence Nationale de la Recherche (French Research Council)
- Netherlands Organisation for Scientific Research (NWO)
- Veni Grants (Netherland)
- Mexican Science Foundation

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)
- European Conference on Computer Vision (ECCV) (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)
- AAAI 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

1. 2022 – **ETH Zurich**, Marcel Geppert, (student of Marc Pollefeys)
2. 2023 – **TU Munich**, Lukas Stumberg, (student of Daniel Cremers)
3. 2023 – **Aarus University**, Xuan Huy Pham, (student of Erdal Kayakan)
4. 2022 – **University of Toronto**, Jason Rebello, (student of Steven Waslander)
5. 2022 – **UPENN**, Wenxin Liu, (student of Vijay Kumar and Kostas Daniilidis)
6. 2021 – **Shanghai Tech**, Xin Peng, (student of Laurent Kneip)
7. 2021 – **EPFL**, Frederike Duembgen (student of Martin Vetterli)
8. 2021 – **ETH Zurich**, Peidong Liu (student of Marc Pollefeys)
9. 2021 – **NTU Singapore**, Wang Qinyi
10. 2020 – **TU Delft**, Sihao Sun (Student of Coen De Visser)
11. 2019 – **ETH Zurich**, Daniele Palossi (student of Luca Benini)
12. 2019 – **ETH Zurich**, Simon Lynen (student of Roland Siegwart)
13. 2018 – **ETH Zurich**, Federico Camposeco (student of Marc Pollefeys)
14. 2018 – **ETH Zurich**, Lorenz Meier (student of Marc Pollefeys)
15. 2017 – **EPFL** Lausanne, Steven Roelofsen (student of Alcherio Martinoli)
16. 2017 – **ETH Zurich**, Lorenz Meier, (student of Marc Pollefeys)
17. 2016 – **INRIA Marseille**, Stefano Mafrica (student of Franck Ruffier)
18. 2016 – **UPENN**, Roy Anati, (student of Kostas Daniilidis)
19. 2016 – **University of Perugia**, Gabriele Costante (student of Paolo Valigi)
20. 2016 – **ETH Zurich**, Olivier Saurer (student of Marc Pollefeys)

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21. 2016 – **EPFL** Lausanne, Maja Varga (student of Dario Floreano)
22. 2015 – **University of Cape Town**, Natasha Govender
23. 2015 – **ETH Zurich**, Andreas Nussberger (student of Luc Van Gool)
24. 2015 – **University of Halmstad**, Sweden, (student of Roland Philippsen)
25. 2015 – **USP**, Univ. of Sao Paulo, Brasil, Raphael Coronel (student of Marcelo Becker)
26. 2014 – **University of Zaragoza**, Yasir Latif (student of Jose Neira)
27. 2014 – **UPENN**, Shaojie Shen, (student of Vijay Kumar)
28. 2014 – **Freie Universitaet Berlin**, Sven Oluf (student of Markus Vincze and Raul Rojas)
29. 2014 – **University of Coimbra**, Michel Antunes, (student of Joao Barreto)
30. 2014 – **INRIA**, Grenoble,Chiara Troiani (student of Christian Laugier)
31. 2014 – **Max Planck Institute**, Volker Grabe (student of Heinrich Bulthoff and Paolo Robuffo Giordano)
32. 2013 – **EPFL** Lausanne, Adrien Briod (student of Dario Floreano)
33. 2013 – **EPFL** Lausanne, Amanda Prorok, (student of Alcherio Martinoli)
34. 2013 – **Polytechnic of Milan**, Ehsan Asadi (Student of Carlo Bottasso)
35. 2012 – **ETH Zurich**, Laurent Kneip (student of Roland Siegwart)
36. 2012 – **ETH Zurich**, Sergei Lupashin (student of Raff D'Andrea)

Attraction of Professors for research stays

Since my appointment at UZH, my research has attracted several professors world top institutions, who stayed from weeks to months:

- **University of York:** Prof. Kosta Derpanis, Summer 2018
- **Shaghai Tech**: Prof. Laurent Kneip, Summer 2018
- **CNRS/INRIA Toulouse:** Prof. Antonio Franchi, Summer 2017
- **Stanford University**: Prof. Mac Schwager, Summer 2017
- **University of Parma**: Prof. Stefano Ghidoni, Fall 2016.
- **UCLA**, Prof. Stefano Soatto, Summer 2014.

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:

- **Shanghai Tech**: Ling Gao, student of Laurent Kneip, 2023
- **Uni Bologna**: Lorenzo Lamberti, student of Luca Benini, 2023
- **Italian Institute of Technology**: Giuseppe l'Erario, student of Daniele Pucci, 2023
- **University of Seville**: Julio Lopez Paneque, student of Anibal Ollero, from Jan. to July 2021
- **University of Michigan**: Drew Hanover, Feb. to August 2021.
- **TU Munich**: Simon Klenk, student of Daniel Cremers, Apr to Oct. 2021
- **Shanghai Tech**: Xin Peng, student of Laurent Kneip, 2021
- **Sant'Anna of Pisa:** Oct. 2020 to Apr. 2021, Mario Bonsembiante, Lorenzo Ferrini, Prof. Davide Bacciu
- **University of Bologna:** Roberto Tazzari, student of Lorenzo Marconi, Nov. 2019 to March 2020.
- **Tohoku University:** Yuto Suebe, student of Kazuya Yoshida, Nov. 2019 to March 2020.
- **University of British Columbia:** Rika Sugimoto, June to Sep, 2019
- **University of Seville:** Dr. Francisco Perez, Anibal Ollero's student, Sep. 2018 to Jan. 2019
- **Monash University:** Timo Stroffegen, Tom Drummond's student, Jun. 2018 to Dec. 2018
- **Australian National University:** Cedric Scheerlinck, Robert Mahony's student, Sep 2018 to Sep. 2019
- **Universida Politecnica de Madrid:** Ana Maqueda, March to Sep. 2017, Prof. Carlos R. Del Blanco
- **Australian National University (ANU)**: Yi Zhou, student of Laurent Kneip and Hongdong Li, Sep. 2017 to Mar. 2018.
- **University of Malaga:** Ruben Gomez, Sep. 2016 to March 2017, Prof. Javier Gonzalez-Jimenez
- **Toyota Research Institute (TRI)**: Dr. Naveen Kuppurswami, visiting postdoc, Jan. 2016 to June 2017.
- **University of Cape Town**: Ms Ra'eesah Mangera is currently visiting Msc student in my lab. 2014
- **University of Genova**: Damiano Verda, visiting PhD student, visiting PhD student from Jan. to Sep. 2013.
- **University of Sao Paulo in Brazil**: Ms Nathaly Gasparin is currently a visiting Bsc student in my lab. 2013
- **Beijing Institute of Technology**: Yanhua Jiang spent 1 year as visiting PhD student in my lab ifrom 2012 to 2013.
- **Carnegie Mellon University (CMU):** Kumar Shaurya Shankar, PhD student of Nathan Michael
- **Italian Institute of Technology (IIT)**: Reza Sabzevari, visiting PhD student in summer 2013.
- **INRIA**: Chiara Troiani spent 9 months as visiting PhD student in my lab in 2013.
- **Max Planck**: Volker Grabe spent 1 year as visiting PhD student in my lab from 2012 to 2013.
- **Carnegie Mellon University**: Xin Yu and Sahuria Shankar Kumar were visiting Msc students in my lab in 2014
- **Caltech/MIT**: Dr. Andrea Censi spent 6 months visiting my lab from 2012 to 2013.

International Robot Competitions

2022	**1st AI vs Human Drone race** – Self organized
2019	**AlphaPilot Autonomous Drone Racing competition** (2nd place winner)
2015 - 2018	**DARPA FLA** (Fast Lightweight Autonomy)
2017	**IROS Autonomous Drone Race** (2nd place winner)
2015 - 2016	**MBZIRC (**Mohamed Bin Zayed International Robotics Challenge)
2014	**KUKA Innovation Award** (Winner, 20k EUR)
2009	**EMAV: European Micro Aerial Vehicle Competition**, (2nd place winner)**:** LINK
2006	**ELROB: First European Land Robot Trial**: LINK

Public Exhibitions with live flying-robot demos

- **NCCR Industry Day 2022**, Lausanne. Nov. 4-5, 2022, 10,000 visitors
- **CIOmove**, Duebendorf, July 17, 2022, 100 visitors
- **Swiss Drone Days**, Duebendorf, June 10-12, 2022, 1000 visitors
- **NCCR Industry Day 2021**, Zurich. Nov. 2, 2021, 2000 visitors
- **NCCR Demo Day 2021**, Duebendorf, Nov. 1, 2021, 100 visitors
- **Scientifica 2021**, Duebendorf, Sep. 3, 2021: 600 visitors
- **ETH Robotics Sum. School 2021**, Duebendorf, Jul. 4, 2022: 70 visitors
- **NCCR Industry Day 2019**, Lausanne, Nov. 2019, 200 visitors
- **NCCR Industry Day 2018**, Lausanne, Nov. 2018, 200 visitors
- **CORL'18 conference**, Zurich 29-31 Oct. 2018, 400 visitors
- **100 Ways of Thinking**, Zurich, Kunsthalle, Sep. 2018, 500 visitors
- **ARCHE** search and rescue demo, Bern, July 5, 2018, 300 visitors
- **Inauguration of the Duebendorf InnoPark**, March 2, 2018, 300 visitors
- **NCCR Industry Day 2017**, Lausanne, Nov. 2017, 500 visitors
- **FSR'17 conference**, Zurich, Switzerland, Sep. 2017, 200 visitors
- **Scientifica 2017,** 01-03 Sep. 2017, 20,000 visitors
- **Achilles 2017**: search and rescue demonstration, Epeisses, Geneva, May, 2017, 260 visitors
- **NCCR Industry Day 2016**, Lausanne, Nov. 2016, 500 visitors
- **SSRR'16 Conference,** Oct. 2016, 100 visitors
- **NCCR Industry Day 2015**, Nov. 2015, 500 visitors
- **Scientifica 2015,** Zurich, Sep. 2015, 20,000 visitors
- **IROS'15**, Hamburg, 02.10.2015, 150 visitors
- **ICRA'15**, Seattle, 27.06.2015, 150 visitors
- **SwissCore 2015**, Brussels, 12.05.2015, 100 visitors
- **CeBIT 2015 Expo**, Hannover, 16-20.03.2015, 30,000 visitors
- **AUTOMATICA 2014**, Munich**,** 3.-6.06.2014, 31,000 visitors [Link] [Video]
- **TunZurich 2013**, Zurich**,** 23-25 October, 2013, 1,000 visitors
- **Scientifica 2013**, Zurich, 31-01 September, 20,000 visitors, 2013
- **Robotic Festival 2013** Lausanne, EPFL, 20 April, 2013, 10,000 visitors
- **Robots on Tour 2013,** Zurich, 09 March, 2013, 4,000 visitors

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Media Coverage

My research has been featured in wider media, including **The New York Times, The Economist, Forbes, BBC News, Discovery Channel, La Repubblica, Neue Zürcher Zeitung** and in technology-focused media, such as IEEE Spectrum, MIT Technology Review, Tech Crunch, Wired, The Verge.

Select list of recent coverage:

Recent TV Video reports:

11.11.2022 – **NZZ Format,** NZZ Format reports on our autonomous drone technology: [Link]
07.11.2022 – **SRF Tagesschau,** Swiss Robotics Days Lausanne: [Youtube [DE] , Youtube [IT] , SRF [DE] RSI [IT]]
13.07.2022 – **RAI-1** - **SuperQuark,** A reportage on the Italian national TV**,** Video: [Link]
20.03.2020 – **SRF and 3Sat,** This documentary (German only) demonstrates our research on how autonomous drones can be used for search and rescue. (video starts at time 15:50) [Link]

Recent newspaper coverage:

28.1.2022 – **The Economist,** Our research on event cameras: [Link]

26.10.2021 – **Forbes,** Learning high-speed flight in the wild: [Link]
23.07.2021 – **Forbes**, AI-controlled drone racer beats human pilots for the first time: [Link]

09.01.2020 – **New York Times** – "A drone from the University of Zurich is an engineering and technical marvel..." [Link]

13.08.2019 – **BBC News**, Drones are able to change their shape while flying [Link]
29.05.2019 – **BBC**, Tech gives drone the ability to avoid mid-air crashes [Link]
21.04.2015 – **BBC**, "Drones Under Control" [Link]

16.05.2019 – **La Repubblica**, Interview with Davide Scaramuzza [Link]
14.12.2018 – **La Repubblica**, Droni con 'ali pieghevoli' per passare ovunque[Link]
14.02.2018 – **La Repubblica,** Tra alberi e palazzi ora il drone fa lo slalom [Link]

27.07.2019 – **Neue Zurcher Zeitung**, "In der Forschung zu autonom fliegenden Drohnen spielt die Uni Zurich weltweit an [Link]
30.08.2018 – **Neue Zurcher Zeitung**, "Wie Robotikprofessor Scaramuzza Erdbebenopfern mit Drohnen helfen will [Link]
24.01.2018 – **Neue Zurcher Zeitung**, "So kommen Drohnen sicher durch die Stadt" [Link]

07.07.2022 – **IEEE Spectrum**, IEEE Spectrum reports on the world's first AI vs. Human Drone Race organized by us: [Link]
08.10.2021 – **IEEE Spectrum,** Autonomous racing drones dodge through forests at 40 kph: [Link]
09.02.2021 – **IEEE Spectrum**, Quadrotor flight despite rotor failure with onboard sensors: [Link]
08.10.2020 – **IEEE Spectrum**, AI-Powered Drone Learns Extreme Acrobatics: [Link]
04.06.2019 – **IEEE Spectrum**, To Fly Solo, Racing Drones Have a Need for AI Speed Training [Link]
13.05.2019 – **IEEE Spectrum**, "Event Camera Helps Drone Dodge Thrown Objects" [Link]
25.01.2018 – **IEEE Spectrum**, "AI-Powered Drone Mimics Cars and Bikes to Navigate Through City Streets" [Link]

09.12.2016 – **MIT Technology Review**, "This Quadcopter Flyes Aggressively Through Narrow Gaps"[Link]
25.07.2022 – **MIT Technology Review,** Interview on AI vs human world champions in Gran Turismo: [Link]

27.06.2018 – **Wired**, Drones Just Learned to Fly Solo, Which Means Pro Racers May Soon Meet Their Match [Link]
11.02.2016 – **Wired**, "This drone uses AI to find its way through a forest"[Link]

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Media Coverage – Full list

2022

- 09.12.2022 – **IEEE Spectrum,** The 10 year anniversary of our group is featured in IEEE Spectrum Video Friday: [Link]
- 01.12.2022 – **BUG.hr,** Croatian PC magazine BUG ranks D. Scaramuzza among 12 most important roboticists: [Link]
- 28.11.2022 – **Hackaday,** Our drone race against the worlds best drone pilot is featured in Hackaday: [Link]
- 23.11.2022 – **EE Times,** The electronics industry magazing EE Times reports on event-cameras: [Link]
- 21.11.2022 – **Haaretz,** Elbit Systems lists my lab as a pioneer on drones flying in complex environments using AI: [Link]
- 11.11.2022 – **NZZ Format,** NZZ Format reports on our autonomous drone technology: [Link]
- 07.11.2022 – **SRF Tagesschau,** Swiss Robotics Days Lausanne: [Youtube [DE] , Youtube [IT] , SRF [DE] RSI [IT]]
- 21.10.2022 – **UZH Space Hub,** UZH Space Hub reports on the parabolic flight campain in which RPG participated: [Link]
- 21.10.2022 – **AI Hub,** AI Hub reports on our work on training efficient controllers via analytic policy gradient: [Link]
- 12.10.2022 – **Tagblatt, Luzerner Zeitung,** Parabolic flight campaign in which my lab participated: [Link , Link]
- 12.10.2022 – **Business Insider,** Davide Scaramuzza provides an expert opinion on the Tesla Optimus Bot: [Link]
- 30.08.2022 – **WeWolver,** Our simulator Flightmare is featured: [Link]
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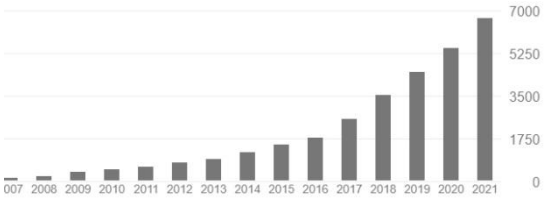

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