Andreas Ziegler

Robotics & CV Researcher/Engineer

25 March 1988

8712 Stäfa, Switzerland

+41 79 581 46 90

https://andreasaziegler.github.io

062.127@gmail.com

Please find my full CV here

About me

I am passionate about a mix of robotics and computer vision research and industrial/commercial applications. My vision is to develop novel algorithms and make them work on real robots. I enjoy working independently on researcher and engineer projects, but I appreciate the opportunity to exchange ideas with a variety of individuals from various backgrounds.

Skill

C++

Python

OpenCV

ROS

boost

PyTorch

(*)[The skill scale is in years of experience.]

education

since 2021 — PhD. Candidate in Robotics & Computer Vision — Tübingen, Germany
Event-based vision for fast robot control

2014-2018 — MSc. ETH in Electical Engineering — Zürich, Switzerland
Specialized in: Robotics, Computer Vision and Machine Learning

2009-2013 — BSc. FHO (HSR) in Electrical Engineering — Rapperswil, Switzerland
Specialized in: Digital Signal and Image Processing, Embedded Systems and Software Engineering and Mobile Communication

publications

[1] A. Horvath, A. Ziegler, S. Gerhard, *et al.*, "Focus on time: Dynamic imaging reveals stretch-dependent cell relaxation and nuclear deformation," *Biophysical Journal*, Jan. 2021.

[2] A. N. Horvath, A. A. Ziegler, S. Gerhard, *et al.*, "Time-controlled multichannel dynamic traction imaging of biaxially stretched adherent cells," Mar. 2020.

[3] T. Cieslewski, A. Ziegler, and D. Scaramuzza, "Exploration without global consistency using local volume consolidation," in *IFRR International Symposium on Robotics Research (ISRR), Hanoi, 2019*, IFRR: IEEE, Oct. 2019.

experience

2021- — PhD Candidate — University of Tübingen
Working on event-based computer vision for fast robot control in collaboration with Sony AI Zürich.

2022 — Computer Vision & ML Research Intern — Prophesee
Worked on slow motion from frame and event data.

2018-2021 — Robotics Engineer — MT-Robot AG
Development and maintenance of software for automated guided vehicle (AGVs), including topics such as multi sensor fusion, mapping, path planning, (multi robot) obstacle avoidance, etc., Deputy Scrum Master.

2018 — Research Assistant — University of Zürich, Robotics and Perception Group
Continued working on my master thesis project which lead to [3].

2018 — Research Associate Intern — Disney Research Zurich
Integrated a Leica total station in an existing ROS setup within the PaintCopter project.

2018 — Research Assistant — Laboratory for Orthopaedic Biomechanics at the University and ETH Zurich
Developed an LED light controller for a microscope setup which contributed to [2].

2017 — Computer Vision & Robotics Research Intern — Pix4D SA
Worked on indoor navigation for UAVs, investigation of barcode localization and detection algorithms for automatic inventory.

2015-2018 — Software Engineer & System Administrator (20%) — Accelerom AG

2013-2014 — Research Assistant (Civil service) — CARD, University Hospital Balgrist
Worked on segmentation algorithms for computer-assisted surgical planning

2013 — Research Assistant (Civil service) — Laboratory for Orthopaedic Biomechanics
Extended and adapted a microscope control software which contributed to [1]

2004-2008 — Electronics Engineer Apprentice — Hch. Kündig & Cie. AG

other information

In my free time, I like to do sports as balance to work. I also volunteer as a Foodsaver atFoodsharing and manage a Labdoo hub.