

ETH Zurich  
Department of Computer Science  
CAB G 82.2  
Universitätstrasse 6  
8092 Zurich, Switzerland

+41 44 632 74 69  
[yifan.wang@inf.ethz.ch](mailto:yifan.wang@inf.ethz.ch)  
<https://yifita.github.io>

## Research Interests

Learning-based image and video processing, geometry processing.

## Education

*ETH Zurich,* Fall 2017 - Now  
**PhD Candidate in Computer Science**  
Research Topic: Detail-driven raw data restoration and enhancement, supervised by Prof. Olga Sorkine-Hornung.

*ETH Zurich,* Fall 2014 - Fall 2016  
**Master of Science in Robotics, Systems and Control**  
Graduated with distinction.  
Master Thesis: Semantic-Regional CNNs for Action Recognition, supervised by Prof. Otmar Hilliges.

*ETH Zurich,* Fall 2013 - Spring 2014  
**ERASMUS program in Electrical Engineering**

*TU Munich,* Fall 2010 - Spring 2013  
**Bachelor of Science in Electrical Engineering and Information Technology**  
Graduated with distinction.  
Bachelor Thesis: High Data Rate MIMO Configuration for LEO Satellite Communications.

## Publications

Neural Cages for Detail-Preserving 3D Deformations - **Wang Yifan**, Noam Aigerman, Vladimir Kim, Siddhartha Chaudhuri, Olga Sorkine-Hornung. CVPR 2020, **oral presentation**.

Differentiable Surface Splatting for Point-based Geometry Processing - **Wang Yifan**, Felice Serena, Shihao Wu, Cengiz Öztireli, Olga Sorkine-Hornung. ACM Transactions on Graphics (TOG) 38.6 (2019): 230.

Blind image super resolution with spatially variant degradations - Victor Cornillière, Abdelaziz Djelouah, **Wang Yifan**, Olga Sorkine-Hornung, Christopher Schroers. ACM Transactions on Graphics (TOG) 38.6 (2019): 166.

Patch-based Progressive 3D Point Set Upsampling - **Wang Yifan**, Shihao Wu, Hui Huang, Daniel Cohen-Or and Olga Sorkine-Hornung. CVPR 2019.

A Fully Progressive Approach to Single-Image Super-Resolution - **Yifan Wang**, F. Perazzi, B. McWilliams, A. Sorkine-Hornung, O. Sorkine-Hornung, C. Schroers. CVPRW 2018.

Two-Stream SR-CNNs for Action Recognition in Videos - **Yifan Wang**, Jie Song, Limin Wang, Luc Van Gool and Otmar Hilliges. BMVC 2016.

**Patents (including pending)**

Video Super-Resolution Using An Artificial Neural Network  
US Patent App. 15/886,625

**Positions**

<i>Research Intern</i> Topic: Shape generation	<i>Adobe Research - Seattle, USA</i> Jun 2019 - Sep 2019
<i>Research Intern</i> Topic: Image-to-image translation	<i>AICFVE - Beijing, China</i> May 2017
<i>Research Intern</i> Topic: Image super-resolution	<i>Disney Research - Zurich, Switzerland</i> Fall 2016 - Feb 2017
<i>Research Assistant</i> Topic: Action Recognition from Videos	<i>ETH Zurich - Zurich, Switzerland</i> May 2016 - Jul 2016
<i>Internship</i> Topic: Hardware for augmented reality, ConnectedDrive Project	<i>BMW Research and Technology - Munich, Germany</i> May 2014

**Awards**

<i>Apple Fellowship in AI/ML</i> Recipient in area "Augmented Reality and Computer Vision"	2020
<i>Facebook Fellowship</i> Finalist in area "Computer Graphics"	2020
<i>New Trends in Image Restoration and Enhancement Challenge</i> Winner Award in Track 1 and Honorable Mention in Tracks 2-4.	2018
<i>HackZurich</i> Finalist in Europe's largest Hackathon.	2016
<i>Heinrich und Lotte Münlfenzl-Stiftung</i> Selected recipient	2013

**Selected Courses**

Geometry Processing and Shape Modelling, Image Analysis and Computer Vision, 3D photography, Machine Learning, Probabilistic Artificial Intelligence, Probabilistic Graphical Models for Image Analysis

**Teaching**

I'm teaching assistant for "Linear Algebra for Computer Science" and "C++ for Mechanical Engineers".