ETH Zurich
Department of Computer Science
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#### **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, Vladmir 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 Cornillère, 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**

Research Intern

Adobe Research - Seattle, USA
Topic: Shape generation

Jun 2019 - Sep 2019

Research Intern

Topic: Image-to-image translation

AICFVE - Beijing, China

May 2017

Research Intern

Disney Research - Zurich, Switzerland
Topic: Image super-resolution

Fall 2016 - Feb 2017

Research Assistant ETH Zurich - Zurich, Switzerland
Topic: Action Recognition from Videos May 2016 - Jul 2016

Internship BMW Research and Technology - Munich, Germany
Topic: Hardward for argmented reality, ConnectedDrive Project May 2014

#### **Awards**

Facebook Fellowship

Finalist in area "Computer Graphics"

New Trends in Image Restoration and Enhancement Challenge

2018

Winner Award in Track 1 and Honorable Mention in Tracks 2-4.

HackZurich 2016 Finalist in Europe's largest Hackathon.

Heinrich und Lotte Münlfenzl-Stiftung
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".