Yifan Wang CURRICULUM VITAE

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
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

[1] Geometry-Consistent Neural Shape Representation with Implicit Displacement Fields - **Wang Yifan**, Lukas Rahmann, Olga Sorkine-Hornung. arXiv 2021

[2] Iso-Points: Optimizing Neural Implicit Surfaces with Hybrid Representations - **Wang Yifan**, Shihao Wu, Cengiz Öztireli, Olga Sorkine-Hornung. CVPR 2021

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

[4] 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.

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

[6] 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.

[7] 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)

US patenting: Techniques For Performing Point-Based Inverse Rendering (Pending) 2019

US patenting: Techniques for Upscaling Images Generated with Undetermined Downscaling Kernels (Pending) 2019

US patenting: Video Super-Resolution Using An Artificial Neural Network (US Patent App. 15/886,625) 2017

Research Internships

DeepMind, (remote) Zurich Switzerland Jul 2021 - Nov 2021
geometry-aware video understanding

Adobe Research, Seattle USA Jun 2019 - Sep 2019
deformation-based shape generation

AICFVE, Beijing China May 2017
Image-to-image translation

Disney Research, Zurich Switzerland Fall 2016 - Feb 2017
Image super-resolution

ETH Zurich, Zurich Switzerland May 2016 - Jul 2016
Action Recognition from Videos

BMW Research and Technology, Munich Germany May 2014 - Jul 2014
Hardware for argmented reality

Awards

Apple Fellowship in AI/ML 2020
Recipient in area "Augmented Reality and Computer Vision"

Facebook Fellowship 2020
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 2013
Selected recipient

Invited Talks

Toronto Geometry Colloquium (toronto-geometry-colloquium.github.io) Feb 2021
"Detail-Driven 3D Content Creation"

Graphics And Mixed Environment Seminar (games-cn.org) Jun 2020
"Detail-driven shape deformation"

Selected Courses

Geometry Processing and Shape Modelling, Image Analysis and Computer Vision, 3D pho-

tography, 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".