

# YUHUA CHEN

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## EDUCATION

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**ETH Zurich, Switzerland** *September 2015 - March 2020 (expected)*  
PhD Candidate  
**Supervisor** Prof. Luc Van Gool  
**Research fields** transfer learning, scene understanding, video analysis  
**Research summary** My research has been focused on addressing the difficulty of acquiring ground-truth supervision for deep models, by transferring the knowledge from another domain or/and from another task.

**ETH Zurich, Switzerland** *September 2013 - June 2015*  
M.Sc in Electrical Engineering and Information Technology  
**GPA** 5.8/6.0      **Major fields** computer vision, machine learning

**University of Science and Technology of China, China** *September 2009 - June 2013*  
B.Sc in Physics  
**GPA** 90/100      **Major fields** computational physics

## EXPERIENCE

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**Google Zurich** *July 2019 - Present*  
Student Researcher, with Prof. Cristian Sminchisescu and Dr. Cordelia Schmid  
**Topic** Dynamic 3D scene understanding from videos

**Computer Vision Lab, ETH Zurich** *September 2015 - Present*  
Research Assistant, with Prof. Luc Van Gool  
**Topic** Learning visual perception across domains and tasks

**Google Zurich** *November 2018 - March 2019*  
Research Intern, with Prof. Cristian Sminchisescu and Dr. Cordelia Schmid  
**Topic** Self-supervised learning of deep models with geometric constraints

**Disney Research Zurich** *September 2014 - December 2014*  
Research Intern, with Dr. Thabo Beeler and Dr. Derek Bradley  
**Topic** Real-time face tracker benchmark

## SELECTED PUBLICATIONS

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**Yuhua Chen**, Cordelia Schmid, Cristian Sminchisescu.  
“Self-supervised Learning with Geometric Constraints in Monocular Video: Connecting Flow, Depth, and Camera” *International Conference in Computer Vision (ICCV)*, 2019

**Yuhua Chen**, Wen Li, Xiaoran Chen, Luc Van Gool.  
“Learning Semantic Segmentation from Synthetic Data: A Geometrically Guided Input-Output Adaptation Approach.” *Computer Vision and Pattern Recognition (CVPR)*, 2019.

Rui Gong, Wen Li, **Yuhua Chen**, Luc Van Gool.  
“DLOW: Domain Flow for Adaptation and Generalization.”  
*Computer Vision and Pattern Recognition (CVPR)*, 2019, *oral presentation*.

**Yuhua Chen**, Wen Li, Christos Sakaridis, Dengxin Dai, Luc Van Gool.  
“Domain Adaptive Faster R-CNN for Object Detection in the Wild.”  
*Computer Vision and Pattern Recognition (CVPR)*, 2018.

**Yuhua Chen**, Wen Li, Luc Van Gool.

“ROAD: Reality Oriented Adaptation for Semantic Segmentation of Urban Scenes.”  
*Computer Vision and Pattern Recognition (CVPR)*, 2018.

**Yuhua Chen**, Jordi Pont-Tuset, Alberto Montes, Luc Van Gool.

“Blazingly Fast Video Object Segmentation with Pixel-Wise Metric Learning.”  
*Computer Vision and Pattern Recognition (CVPR)*, 2018.

**Yuhua Chen**, Dengxin Dai, Jordi Pont-Tuset, Luc Van Gool,

“Scale-Aware Alignment of Hierarchical Image Segmentation.”  
*Computer Vision and Pattern Recognition (CVPR)*, 2016.

Kevis-Kokitsi Maninis, Sergi Caelles, **Yuhua Chen**, Jordi Pont-Tuset, Laura Leal-Taixe, Daniel Cremers, Luc Van Gool.

“Video Object Segmentation Without Temporal Information.”  
*IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI)*, 2018.

*The complete list can be found in my [google scholar profile](#).*

## PROFESSIONAL SERVICE

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<b>Conference Reviewer</b>	<i>CVPR, ICCV, NIPS, ICML, AAAI</i>
<b>Journal Reviewer</b>	<i>IJCV, T-PAMI, IEEE TIP, IEEE Transactions on Cybernetics, IEEE Transactions on Multimedia, IEEE Access</i>
<b>Workshop Organizer</b>	DAVIS Challenge on Video Object Segmentation (in conjunction with <i>CVPR 2018</i> )

## TEACHING

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<b>Teaching Assistant</b>	Image Analysis and Computer Vision, ETH Zurich.	<i>Fall 16, 17</i>
	Computer Vision, ETH Zurich.	<i>Fall 15</i>
<b>Thesis Supervisor</b>	Supervised more than 10 master students.	

## TECHNICAL SKILLS

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<b>Programming Language</b>	Python, C/C++, Matlab
<b>Deep Learning Framework</b>	Caffe, PyTorch, Tensorflow