

YONGQIN XIAN

Google Scholar \diamond Personal Website

ETF D113.2, Sternwartstrasse 7 \diamond 8092 Zürich \diamond Switzerland

(+41) 0767471357 \diamond yongqin.xian@vision.ee.ethz.ch

RESEARCH EXPERIENCE

ETH Zurich

Post-doctoral researcher with Prof. Luc Van Gool

August 2021 - Now

Zürich, Switzerland

- Few-shot object detection, 3D vision and image super resolution

Max Planck Institute for Informatics

Post-doctoral researcher with Prof. Bernt Schiele and Prof. Zeynep Akata

August 2020 - July 2021

Saarbrücken, Germany

- Learning from limited supervision for computer vision tasks

Facebook AI Research

Research Intern with Prof. Lorenzo Torresani

January 2019 - April 2019

Cambridge, USA

- Few-shot video understanding

Max Planck Institute for Informatics

PhD candidate with Prof. Bernt Schiele and Prof. Zeynep Akata

January 2016 - July 2020

Saarbrücken, Germany

- Zero-shot and few-shot learning

Machine Learning Group of Saarland University

Research Assistant with Prof. Matthias Hein

April 2014 - October 2014

Saarbrücken, Germany

- Motion segmentation with hypergraph cut

EDUCATION

Max Planck Institute Informatics, Germany

PhD (summa cum laude) in Computer Science

2016-2020

Saarland University, Germany

MSc (Honors degree) in Computer Science

2013-2016

Beijing Institute of Technology, China

BSc in Computer Science

2009-2013

AWARDS

Doctoral Consortium

CVPR, 2020

Chinese Government Award for Outstanding Self-Financed Students Abroad

CSC, 2018

Qualcomm Innovation Fellowship Finalist

Qualcomm, Amsterdam, 2018

Master Degree with Honors

Saarland University, Germany, 2016

Graduate Fellowship

Saarland University, Germany, 2013-15

Excellent Student Scholarship

Beijing Institute of Technology, China, 2009-13

PUBLICATIONS

Learning Graph Embeddings for Open World Compositional Zero-Shot Learning

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)

2022

Massimiliano Mancini*, Muhammad Ferjad Naeem*, **Yongqin Xian**, Zeynep Akata

- Attribute Prototype Network for Any-Shot Learning** 2022
International Journal of Computer Vision (IJCV)
Wenjia Xu, **Yongqin Xian**, Niujiu Wang, Bernt Schiele Zeynep Akata
- VGSE: Visually-Grounded Semantic Embeddings for Zero-Shot Learning** 2022
IEEE Computer Vision and Pattern Recognition (CVPR) Conference
Wenjia Xu, **Yongqin Xian**, Niujiu Wang, Bernt Schiele Zeynep Akata
- Generalized Few-Shot Video Classification with Video Retrieval and Feature Generation** 2021
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
Yongqin Xian, Bruno Korbar, Matthijs Douze, Lorenzo Torresani, Bernt Schiele, Zeynep Akata
- Distilling Audio-Visual Knowledge by Compositional Contrastive Learning** 2021
IEEE Computer Vision and Pattern Recognition (CVPR) Conference
Yanbei Chen, **Yongqin Xian**, Almut Sophia Koepke, Zeynep Akata
- Learning Graph Embeddings for Compositional Zero-shot Learning** 2021
IEEE Computer Vision and Pattern Recognition (CVPR) Conference
Muhammad Ferjad Naeem, **Yongqin Xian**, Federico Tombari, Zeynep Akata
- Open World Compositional Zero-Shot Learning** 2021
IEEE Computer Vision and Pattern Recognition (CVPR) Conference
Massimiliano Mancini*, Muhammad Ferjad Naeem*, **Yongqin Xian**, Zeynep Akata
- Prototype-based Incremental Few-Shot Semantic Segmentation** 2021
British Machine Vision Conference (BMVC)
Fabio Cermelli, Massimiliano Mancini, **Yongqin Xian**, Zeynep Akata, Barbara Caputo
- (SP)²Net for Generalized Zero-Label Semantic Segmentation** 2021
DAGM German Conference on Pattern Recognition (GCPR)
Anurag Das, **Yongqin Xian**, Yang He, Bernt Schiele, Zeynep Akata
- A Closer Look at Self-training for Zero-Label Semantic Segmentation** 2021
CVPR 2021 Workshop on Learning with Limited and Imperfect Data
Giuseppe Pastore, Fabio Cermelli, **Yongqin Xian**, Massimiliano Mancini, Zeynep Akata, Barbara Caputo
- Attribute Prototype Network for Zero-Shot Learning** 2020
Conference on Neural Information Processing Systems (NeurIPS)
Wenjia Xu, **Yongqin Xian**, Jiuniu Wang, Bernt Schiele, Zeynep Akata
- Analyzing the Dependency of ConvNets on Spatial Information** 2020
The German Conference on Pattern Recognition (GCPR)
Yue Fan, **Yongqin Xian**, Max Maria Losch, Bernt Schiele
- Generalized Many-Way Few-Shot Video Classification** 2020
ECCV Workshop on Imbalanced Problem in Computer Vision
Yongqin Xian, Bruno Korbar, Matthijs Douze, Bernt Schiele, Zeynep Akata, Lorenzo Torresani
- f-VAEGAN-D2: A Feature Generating Framework for Any-Shot Learning** 2019
IEEE Computer Vision and Pattern Recognition (CVPR) Conference Long Beach, CA
Yongqin Xian, Saurabh Sharma, Bernt Schiele, Zeynep Akata
- Semantic Projection Network for Zero- and Few-Label Semantic Segmentation** 2019
IEEE Computer Vision and Pattern Recognition (CVPR) Conference Long Beach, CA
Yongqin Xian*, Subhabrata Choudhury*, Yang He, Bernt Schiele, Zeynep Akata
- Zero-Shot Learning – A Comprehensive Evaluation of the Good, the Bad and the Ugly** 2018
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
Yongqin Xian, Christoph H. Lampert, Bernt Schiele, Zeynep Akata

Feature Generating Networks for Zero-Shot Learning	2018
<i>IEEE Computer Vision and Pattern Recognition (CVPR) Conference</i>	<i>Salt Lake City, UT</i>
Yongqin Xian, Tobias Lorenz, Bernt Schiele, Zeynep Akata	
Zero-Shot Learning - The Good, the Bad and the Ugly	2017
<i>IEEE Computer Vision and Pattern Recognition (CVPR) Conference</i>	<i>HL, Hawaii</i>
Yongqin Xian, Bernt Schiele, Zeynep Akata	
Latent Embeddings for Zero-shot Classification	2016
<i>IEEE Computer Vision and Pattern Recognition (CVPR) Conference</i>	<i>Las Vegas, NV</i>
Yongqin Xian, Zeynep Akata, Gaurav Sharma, Quynh Nguyen, Matthias Hein, Bernt Schiele	

TEACHING AND TRAINING EXPERIENCE

TA for Machine Learning Course (Prof. Matthias Hein), Saarland University	Oct 2015 - Mar 2016
Invited Student at Google's 2nd Computer Vision Summit, Zurich, Switzerland	Sep. 2018
Computer Vision Summer School , Sicily, Italy	July 2018
Machine Learning Summer School , MPI Intelligent Systems, Germany	July 2015
Software Engineer Intern at Oracle Inc., Beijing, China	June-Dec. 2012

SUPERVISION EXPERIENCE

Master Thesis of Anurag Das (now PhD student at MPPI)	2021
Master Thesis of Muhammad Ferjad Naeem (now PhD student at ETH)	2020
Research Immersion Lab of Miaoran Zhang (now PhD student at Saarland University)	2019
Master Thesis of Yue Fan (now PhD student at MPPI)	2019
Master Thesis of Subhabrata Choudhury (now PhD student at Oxford University)	2018
Bachelor Thesis of Tobias Lorenz (now PhD student at CISPA)	2017

ACADEMIC ACTIVITIES

Reviewer in International Conference on Learning Representations (ICLR)	2019-21
Reviewer in International Conference on Machine Learning (ICML)	2020
Reviewer in Conference on Neural Information Processing Systems (NIPS)	2018-22
Reviewer in IEEE Computer Vision and Pattern Recognition Conference (CVPR)	2018-22
Reviewer in Transactions on Pattern Analysis and Machine Intelligence (TPAMI)	2017-22

SPOKEN LANGUAGES

Chinese Maternal **English** Proficiency **German** Beginner