# Wei Lin (Mr.)

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**Email**: wlin2021at@gmail.com **HomePage**: link **GitHub**: link **Google Scholar**: link

Research interests

Vision-language models, multimodal learning, domain adaptation, video understanding

Current Position

Postdoc at the Institute for Machine Learning — Linz, Austria
(headed by Prof. Sepp Hochreiter, Father of LSTM) — Oct 2023 – current
Johannes Kepler University

Education

**Graz University of Technology** — Graz, Austria
PhD in Computer Science — Jan 2019 – Mar 2024
Mentors:
Prof. Horst Bischof (Graz University of Technology)
Prof. Hilde Kuehne (Goethe University Frankfurt, MIT-IBM Watson AI lab)

**Technical University of Munich** — Munich, Germany
M.Sc. in Electrical and Computer Engineering — Oct 2015 - Jul 2018
Mentors: Prof. Eckehard Steinbach

Organization

**Program Chair** of the 2nd Workshop on "What is Next in Multimodal Foundation Models" and **Challenge Chair** for the MMFM-Challenge on CVPR 2024, Seattle

Publications

**Comparison Visual Instruction Tuning**
Wei Lin, Muhammad Jehanzeb Mirza, Sivan Doveh, Rogerio Feris, Raja Giryes, Sepp Hochreiter, Leonid Karlinsky
In collaboration with the MIT-IBM Watson AI Lab
*Arxiv 2024*

**Meta-Prompting for Automating Zero-shot Visual Recognition with LLMs**
Muhammad Jehanzeb Mirza, Leonid Karlinsky, Wei Lin, Sivan Doveh, Jakub Micorek, Mateusz Kozinski, Hilde Kuehne, Horst Possegger
In collaboration with the MIT-IBM Watson AI Lab
*European Conference on Computer Vision (ECCV) 2024*

**Conme: Rethinking Evaluation of Compositional Reasoning for Modern VLMs**

*Irene Huang, *Wei Lin, *Muhammad Jehanzeb Mirza, Jacob Hansen, Sivan Doveh, Victor Ion Butoi, Roei Herzig, Assaf Arbelle, Hilde Kuehne, Trevor Darrell, Chuang Gan, Aude Oliva, Rogerio Feris, Leonid Karlinsky (*equal contribution)
In collaboration with the MIT-IBM Watson AI Lab
*Arxiv 2024*

**Overlooked Aspects in the Evaluation of Out-Of-Distribution Detection Methods**
*Bernhard Lehner, *Christian Huber, Bernhard Moser, Claus Hofmann, Wei Lin, Sepp Hochreiter (*equal contribution)
*Arxiv 2024*

**MAtch, eXpand and Improve: Unsupervised Finetuning for Zero-Shot Action Recognition with Language Knowledge**
Wei Lin, Leonid Karlinsky, Nina Shvetsova, Horst Possegger, Mateusz Kozinski, Rameswar Panda, Rogerio Feris, Hilde Kuehne, Horst Bischof
In collaboration with the MIT-IBM Watson AI Lab
*International Conference on Computer Vision (ICCV) 2023*

**LaFTer: Label-Free Tuning of Zero-shot Classifier using Language and Unlabeled Image Collections**
Muhammad Jehanzeb Mirza, Leonid Karlinsky, Wei Lin, Mateusz Kozinski, Horst Possegger, Rogerio Feris, Horst Bischof
*Conference on Neural Information Processing Systems (NeurIPS) 2023*

**MATE: Masked Autoencoders are Online 3D Test-Time Learners**
*Muhammad Jehanzeb Mirza, *Inkyu Shin, *Wei Lin, Andreas Schriebl, Kunyang Sun, Jaesung Choe, Horst Possegger, Mateusz Kozinski, In So Kweon, Kun-Jin Yoon, Horst Bischof (*equal contribution)
*International Conference on Computer Vision (ICCV) 2023*

**TAP: Targeted Prompting for Task Adaptive Generation of Textual Training Instances for Visual Classification**
Muhammad Jehanzeb Mirza, Leonid Karlinsky, Wei Lin, Horst Possegger, Rogerio Feris, Horst Bischof
*Arxiv 2023*

**Video Test-Time Adaptation for Action Recognition**
*Wei Lin, *Muhammad Jehanzeb Mirza, Mateusz Kozinski, Horst Possegger, Hilde Kuehne, Horst Bischof (*equal contribution)
*Conference on Computer Vision and Pattern Recognition (CVPR) 2023*

**ActMAD: Activation Matching to Align Distributions for Test-Time-Training**
Muhammad Jehanzeb Mirza, Pol Jané Soneira, Wei Lin, Mateusz Kozinski, Horst Possegger, Horst Bischof
*Conference on Computer Vision and Pattern Recognition (CVPR) 2023*

**CycDA: Unsupervised Cycle Domain Adaptation to Learn from Image to Video**
Wei Lin, Anna Kukleva, Kunyang Sun, Horst Possegger, Hilde Kuehne, Horst Bischof
*European Conference on Computer Vision (ECCV) 2022*

**Extended Abstract CycDA: Unsupervised Cycle Domain Adaptation to Learn from Image to Video**
Wei Lin, Anna Kukleva, Kunyang Sun, Horst Possegger, Hilde Kuehne, Horst Bischof
*ECCV 2022 Workshop of Out Of Distribution Generalization in Computer Vision, 2022*

**Unsupervised Class-aware 3D Object Detection in LiDAR Point Clouds**
Christian Fruhwirth-Reisinger, Wei Lin, Dusan Malic, David Schinagl, Georg Krispel, Horst Possegger, Horst Bischof
*Arxiv 2023*

**AIR-DA: Adversarial Image Reconstruction for Unsupervised Domain Adaptive Object Detection**
Kunyang Sun, Wei Lin, Haoqin Shi, Zhengming Zhang, Yongming Huang, Horst Bischof
*IEEE Robotics and Automation Letters (RA-L) 2023*

**TAEC: Unsupervised Action Segmentation with Temporal-Aware Embedding and Clustering**
Wei Lin, Anna Kukleva, Horst Possegger, Hilde Kuehne, Horst Bischof
*Computer Vision Winter Workshop 2023*

## Review service

**Conference**
ECCV 2022, ISMAR 2023, CVPR 2023, NeurIPS 2023, WACV 2024, CVPR 2024, ECCV 2024, NeurIPS 2024, NeurIPS 2024 Dataset and Benchmark Track
**Journal**
TPAMI 2023, TNNLS 2023, IEEE Trans. Multimedia 2023, Pattern Recognition Letters 2024

## Activity

International Computer Vision Summer School 2023

## Teaching

Deep Learning and Neural Networks I & II Exercise, Machine Learning: Supervised Techniques Exercise, Machine Learning: Unsupervised Techniques Exercise

## Honors and scholarships

Scholarship for Foreign Students (Technical University of Munich) 06.2016
Scholarship for Foreign Students (Technical University of Munich) 06.2017

## Industry experience

**Robert Bosch GmbH,** Corporate Research — Hildesheim, Germany
Research Internship — Oct 2017 - May 2018
Master's Thesis : 3D Human Pose-based Action Recognition

**Robert Bosch GmbH,** Corporate Research — Leonberg, Germany
Research Internship — Feb 2017 - Jul 2017
Project: Road surface estimation from monocular video data based on P-Spline regression and 3D reconstruction

## Skills

**Programming**
Proficient in: Python, C++

**Languages**
English, German, Chinese