

CHEN WEI

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[weichen582.github.io](https://github.com/weichen582)

RESEARCH INTEREST

Artificial Intelligence, Machine Learning, Computer Vision

EDUCATION

Johns Hopkins University, Baltimore, MD 2019 - 2024
Ph.D. in Computer Science
Advisor: Bloomberg Distinguished Professor Alan L. Yuille

Peking University, Beijing, China 2015 - 2019
B.Sc. in Computer Science
Graduated with Honors

RESEARCH APPOINTMENTS

Google DeepMind Summer 2023
Research Intern
Mentors: Zhishuai Zhang, Chenxi Liu, Siyuan Qiao, Jiahui Yu
Large-scale diffusion generative models

Fundamental AI Research (FAIR), Meta Summer 2022
Research Intern
Mentors: Christoph Feichtenhofer, Yanghao Li, Po-Yao Huang
Self-supervised learning for images and videos

Facebook AI Research (FAIR) Summer 2021
Research Intern
Mentors: Christoph Feichtenhofer, Saining Xie, Chao-Yuan Wu, Haoqi Fan
Self-supervised learning for images and videos

Google Cloud AI Summer 2020
Research Intern
Mentors: Fan Yang, Clayton Mellina, Kihyuk Sohn
Class-imbalanced and semi-supervised learning

Johns Hopkins University Summer 2018
Research Intern
Advisors: Lingxi Xie, Alan Yuille
Self-supervised learning for images

Peking University 2017 - 2019
Research Intern
Advisors: Wenhan Yang, Jiaying Liu
Restoration and reconstruction of low quality images

HONORS & AWARDS

EECS Rising Stars	2023
Most Influential CVPR Papers [Link]	2023
ECCV Outstanding Reviewer	2022
Most Cited BMVC Papers over the Last Five Years (2nd) [Link]	2022
Fangzheng Scholarship	2018
Outstanding Students, Peking University	2016, 2018
China National Scholarship (1%)	2016

PUBLICATIONS [\[Google Scholar\]](#)

Chen Wei, Chenxi Liu, Siyuan Qiao, Zhishuai Zhang, Alan Yuille, Jiahui Yu. De-Diffusion Makes Text a Strong Cross-Modal Interface. *arXiv*, 2023.

Haoqin Tu*, Bingchen Zhao*, **Chen Wei**, Cihang Xie. Sight Beyond Text: Multi-Modal Training Enhances LLMs in Truthfulness and Ethics. *arXiv*, 2023.

Chen Wei, Karttikeya Mangalam, Po-Yao Huang, Yanghao Li, Haoqi Fan, Hu Xu, Huiyu Wang, Cihang Xie, Alan Yuille, Christoph Feichtenhofer. Diffusion Models as Masked Autoencoders. In *International Conference on Computer Vision (ICCV)*, 2023.

Yuanze Lin, **Chen Wei**, Huiyu Wang, Alan Yuille, Cihang Xie. SMAUG: Sparse Masked Autoencoder for Efficient Video-Language Pre-training. In *International Conference on Computer Vision (ICCV)*, 2023.

Zihao Wei, **Chen Wei**, Jieru Mei, Yutong Bai, Zeyu Wang, Xianhang Li, Huiyu Wang, Alan Yuille, Yuyin Zhou, Cihang Xie. Masked Autoencoders are Secretly Efficient Learners. In submission, 2023.

Junyang Wu, Xianhang Li, **Chen Wei**, Huiyu Wang, Alan Yuille, Yuyin Zhou, Cihang Xie. Unleashing the power of visual prompting at the pixel level. *arXiv*, 2023.

Chaitanya Ryali, Yuan-Ting Hu, Daniel Bolya, **Chen Wei**, Haoqi Fan, Po-Yao Huang, Vaibhav Aggarwal, Arkabandhu Chowdhury, Omid Poursaeed, Judy Hoffman, Jitendra Malik, Yanghao Li, Christoph Feichtenhofer. Hiera: A Hierarchical Vision Transformer without the Bells-and-Whistles. In *International Conference on Machine Learning (ICML)*, 2023. (**Oral**)

Yutong Bai, Zeyu Wang, Junfei Xiao, **Chen Wei**, Huiyu Wang, Alan Yuille, Yuyin Zhou, Cihang Xie, Masked Autoencoders Enable Efficient Knowledge Distillers. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023.

Feng Wang, Huiyu Wang, **Chen Wei**, Alan Yuille, Wei Shen. CP2: Copy-Paste Contrastive Pretraining for Semantic Segmentation. In *European Conference on Computer Vision (ECCV)*, 2022.

Xianhang Li, Huiyu Wang, **Chen Wei**, Jieru Mei, Alan Yuille, Yuyin Zhou, Cihang Xie. In Defense of Image Pre-Training for Spatiotemporal Recognition. In *European Conference on Computer Vision (ECCV)*, 2022.

Chen Wei, Haoqi Fan, Saining Xie, Chao-Yuan Wu, Alan Yuille, Christoph Feichtenhofer. Masked Feature Prediction for Self-Supervised Visual Pre-Training. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022. (**Most Influential CVPR Papers**)

Jinghao Zhou, **Chen Wei**, Huiyu Wang, Wei Shen, Cihang Xie, Alan Yuille, Tao Kong. iBOT: Image BERT Pre-Training with Online Tokenizer. In *International Conference on Learning Representations (ICLR)*, 2022.

Chen Wei, Kihyuk Sohn, Clayton Mellina, Alan Yuille, Fan Yang. CReST: A Class Rebalancing Self-Training Framework for Imbalanced Semi-Supervised Learning. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021.

Chen Wei, Huiyu Wang, Wei Shen, Alan Yuille. CO2: Consistent Contrast for Unsupervised Visual Representation Learning. In *International Conference on Learning Representations (ICLR)*, 2021.

Chen Wei, Lingxi Xie, Xutong Ren, Yingda Xia, Chi Su, Jiaying Liu, Qi Tian, Alan Yuille. Iterative Reorganization with Weak Spatial Constraints: Solving Arbitrary Jigsaw Puzzles for Unsupervised Representation Learning. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.

Chen Wei*, Wenjing Wang*, Wenhan Yang and Jiaying Liu. Deep Retinex Decomposition for Low-Light Enhancement. In *British Machine Vision Conference (BMVC)*, 2018. (**Oral, Most Cited BMVC Papers**)

Wenjing Wang*, **Chen Wei***, Wenhan Yang, Jiaying Liu. GLADNet: Low-Light Enhancement Network with Global Awareness. In *IEEE International Conference on Automatic Face and Gesture Recognition (FG)*, 2018.

MENTORSHIP

Research Mentorship

- Kai Cheng (Peking University, Undergraduate student)
- Yuanze Lin (University of Washington, Master student)
- Xianhang Li (University of California Santa Cruz, PhD Student)
- Feng Wang (Tsinghua University, Master student)
- Jinghao Zhou (University of Oxford, PhD student)

Counseling

- Women Mentoring Whiting Program (Johns Hopkins University) Fall 2023 - Spring 2024

SERVICES

Teaching

- Teaching Assistant, Johns Hopkins University Fall 2022
 - Course: Probabilistic Models of the Visual Cortex
 - Instructor: Alan L. Yuille
 - Lectures: GANs, StyleGANs and Autoencoders

Conference Reviewer

- International Conference on Computer Vision (ICCV) 2021-2023
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2022-2024
- European Conference on Computer Vision (ECCV) 2022
- International Conference on Machine Learning (ICML) 2023
- Conference on Neural Information Processing Systems (NeurIPS) 2023
- International Conference on Learning Representations (ICLR) 2024

Journal Reviewer

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- International Journal of Computer Vision (IJCV)
- IEEE Transactions on Multimedia (TMM)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- Neurocomputing