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Working EXPERIENCE Postdoctoral Researcher at Meta

July 2023 - Now

New York City, NY

EDUCATION PhD in Computer Science Sep. 2018 - May 2023

University of Maryland, Colledge Park (UMD)

Advisor: Abhinav Shrivastava

Master in Pattern Recognition & Intelligent System

Sep. 2015 - Jun. 2018

Huazhong University of Science&Technology (HUST)

Advisor: Guoyou Wang

B.Eng in Optoelectronic Information Engineering

Sep. 2011 - Jun. 2015

Huazhong University of Science&Technology (HUST)

Interests

Implicit video representation, advanced compression techniques, discriminative selflearning, generative pre-training, efficient deployment of deep neural networks

Publications

• Fast Encoding and Decoding for Implicit Video Representation (Under Review)

Hao Chen, Saining Xie, Ser-Nam Lim, Abhinav Shrivastava

• HNeRV: A Hybrid Neural Representation for Videos

(CVPR 2023)

Hao Chen, Matt Gwilliam, Ser-Nam Lim, Abhinav Shrivastava

• Towards Scalable Neural Representation for Diverse Videos

(CVPR 2023)

Bo He, Xitong Yang, Hanyu Wang, Zuxuan Wu, Hao Chen, Shuaiyi Huang, Yixuan Ren, Ser-Nam Lim, Abhinav Shrivastava

• CNeRV: Generalizable Neural Visual Representation with Content-adaptive Embedding (BMVC 2022 Oral)

Hao Chen, Matt Gwilliam, Bo He, Ser-Nam Lim, Abhinav Shrivastava

• NeRV: Neural Representations for Videos

(NeurIPS 2021)

Hao Chen, Bo He, Hanyu Wang, Yixuan Ren, Ser-Nam Lim, Abhinav Shrivastava

• HR-RCNN: Hierarchical Relational Reasoning for Object Detection (BMVC 2021)

Hao Chen, Abhinav Shrivastava

• Group Ensemble: Learning an Ensemble of ConvNets in a single ConvNet (Arxiv Preprint)

Hao Chen, Abhinav Shrivastava

• The Lottery Ticket Hypothesis for Object Recognition (CVPR 2021)

Sharath Girish, Shishira R. Maiya, Kamal Gupta, **Hao Chen**, Larry Davis, Abhinav Shrivastava

 \bullet GTA: Global Temporal Attention for Video Action Understanding (BMVC 2021)

Bo He, Xitong Yang, Zuxuan Wu, Hao Chen, Ser-Nam Lim, Abhinav Shrivastava

• Progressive Object Transfer Detection (TIP-2019)

Hao Chen, Yali Wang, Guoyou Wang, Xiang Bai, Yu Qiao

• LSTD: A Low-Shot Transfer Detector for Object Detection (AAAI-18 Spotlight)
Hao Chen, Yali Wang, Guoyou Wang, Yu Qiao

EXPERIENCE

- \bullet Multimedia Lab at Shenzhen Institutes of Advanced Technology Visiting student, work closely with Prof. Yu Qiao (Jan. 2017 Aug. 2017)
- Teaching assistant for CMSC320 at UMD (2018 Fall)
- Research assistant for Prof. Abihnav at UMD (2019 2023)
- \bullet Research intern at Adobe (May 2021 August 2021)

Work on panoptic segmentation, with Zhe Lin

• Research intern at Titok (May 2022 - August 2022)

Work on generalizable video neural representation, with Heng Wang

AWARDS

- National Endeavor Fellowship in 2013
- UMD Dean Fellowship 2019-2020