
EDUCATION

- **University of Maryland, College Park** Sept 2018 - Now
Ph.D. in Computer Science; Advisor: Abhinav Shrivastava; GPA: 4.0/4.0 Maryland, USA
- **Columbia University** Jan 2017 - July 2017
Visiting Student in Computer Science; GPA: 4.0/4.0 New York, USA
- **University of Chinese Academy of Sciences (UCAS)** Sept 2014 - June 2018
Bachelor in Computer Science; GPA: 3.88/4.0 Beijing, China

RESEARCH INTEREST

My research is primarily about video-related topics, including video understanding, video neural representation, and multimodal learning. Recently, I start research on the video generation task.

INTERNSHIP EXPERIENCE

- **Adobe** May 2022 - Nov 2022
Research Intern Mentor: Zhaowen Wang, Trung Bui
 - Multi-modal summarization task with video and text. Paper accepted at CVPR 2023.
- **Baidu Research USA** Mar 2021 - Jan 2022
Research Intern Mentor: Le Kang
 - Weakly-supervised temporal action localization. Paper accepted at CVPR 2022.
 - 1-st place in CVPR 2021 SoccerNet-v2 challenge on action spotting and replay grounding tasks. [Link](#)

PUBLICATIONS

- *Chop and Learn: Recognizing and Generating Object-State Compositions*
Nirat Saini, Hanyu Wang, Kamal Gupta, Archana Swaminathan, **Bo He**, Vinoj Jayasundara, Abhinav Shrivastava.
In Submission.
- *Diffusion-based Image Color Editing with Auxiliary Color Restoration Tasks*
Yixuan Ren, Jing Shi, Zhifei Zhang, Yifei Fan, Zhe Lin, **Bo He**, Abhinav Shrivastava.
In Submission.
- *Align and Attend: Multimodal Summarization with Dual Contrastive Losses.*
Bo He, Jun Wang, Jieli Qiu, Abhinav Shrivastava, Trung Bui, Zhaowen Wang.
CVPR, 2023. [PDF](#)
- *Towards Scalable Neural Representation for Diverse Videos.*
Bo He, Xitong Yang, Hanyu Wang, Zuxuan Wu, Hao Chen, Shuaiyi Huang, Yixuan Ren, Ser-Nam Lim, Abhinav Shrivastava.
CVPR, 2023. [PDF](#)
- *CNeRV: Content-adaptive Neural Representation for Visual Data.*
Hao Chen, Matthew Gwilliam, **Bo He**, Ser-Nam Lim, Abhinav Shrivastava.
BMVC (Oral), 2022. [PDF](#)
- *Learning Semantic Correspondence with Sparse Annotations.*
Shuaiyi Huang, Luyu Yang, **Bo He**, Songyang Zhang, Xuming He, Abhinav Shrivastava.
ECCV, 2022. [PDF](#)

- *ASM-Loc: Action-aware Segment Modeling for Weakly-Supervised Temporal Action Localization.*
Bo He, Xitong Yang, Le Kang, Zhiyu Cheng, Xin Zhou, Abhinav Shrivastava.
CVPR, 2022. [PDF](#)
- *Recognizing Actions using Object States.*
Nirat Saini, **Bo He**, Gaurav Shrivastava, Sai Saketh Rambhatla, Abhinav Shrivastava.
ICLRW, 2022. [PDF](#)
- *NeRV: Neural Representations for Videos.*
Hao Chen, **Bo He**, Hanyu Wang, Yixuan Ren, Ser-Nam Lim, Abhinav Shrivastava.
NeurIPS, 2021. [PDF](#)
- *GTA: Global Temporal Attention for Video Action Understanding.*
Bo He, Xitong Yang, Zuxuan Wu, Hao Chen, Sernam Lim, Abhinav Shrivastava.
BMVC, 2021. [PDF](#)

SKILLS

- **Programming Languages:** Python, C, Matlab, SQL, Java
- **Frameworks and Tools:** Pytorch, OpenCV, Tensorflow, L^AT_EX, Git