



JUNFEI XIAO

Baltimore, Maryland

<https://lambert-x.github.io>

☎ 410-949-7876 ✉ xiaojf97@gmail.com  

Education

Johns Hopkins University

Ph.D. in Computer Science

2022 -

Baltimore, Maryland

Johns Hopkins University

M.S.E in Computer Science, GPA: 3.97/4.0

Sep. 2019 – May 2021

Baltimore, Maryland

Beihang University

B.E. in Mechanical Engineering, Double Degree in Mathematics, GPA: 3.8/4.0 (Top 2%)

Sep. 2015 – June 2019

Beijing, China

Experience

CCVL Lab, Johns Hopkins University

Research Assistant, Advisor: Alan Yuille

Sep. 2021 – Present

Baltimore, Maryland

Google Research

Student Researcher

July 2023 – Feb. 2024

Mountain View, California

CCVL Lab, Johns Hopkins University

Research Intern, Advisor: Alan Yuille

June 2020 – Sep. 2021

Baltimore, Maryland

Publications and Manuscripts

- [11] **Junfei Xiao**, Zheng Xu, Alan Yuille, Shen Yan, and Boyu Wang. “PaLM2-VAdapter: Progressively Aligned Language Model Makes a Strong Vision-language Adapter”. In: *arXiv preprint arXiv:2402.10896* (2024).
- [10] **Junfei Xiao**, Ziqi Zhou, Wenxuan Li, Shiyi Lan, Jieru Mei, Zhiding Yu, Alan Yuille, Yuyin Zhou, and Cihang Xie. “A Semantic Space is Worth 256 Language Descriptions: Make Stronger Segmentation Models with Descriptive Properties”. In: *arXiv preprint arXiv:2312.13764* (2023).
- [9] Sucheng Ren, Zeyu Wang, Hongru Zhu, **Junfei Xiao**, Alan Yuille, and Cihang Xie. “Rejuvenating image-GPT as Strong Visual Representation Learners”. In: *arXiv preprint arXiv:2312.02147* (2023).
- [8] Jie Liu, Yixiao Zhang, Jie-Neng Chen, **Junfei Xiao**, Yongyi Lu, Bennett A Landman, Yixuan Yuan, Alan Yuille, Yucheng Tang, and Zongwei Zhou. “Clip-driven universal model for organ segmentation and tumor detection”. In: *International Conference on Computer Vision (ICCV)* (2023).
- [7] Qixin Hu, Yixiong Chen, **Junfei Xiao**, Shuwen Sun, Jie-Neng Chen, Alan Yuille, and Zongwei Zhou. “Label-Free Liver Tumor Segmentation”. In: *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)* (2023).
- [6] Yutong Bai, Zeyu Wang, **Junfei Xiao**, Chen Wei, Huiyu Wang, Alan Yuille, Yuyin Zhou, and Cihang Xie. “Masked Autoencoders Enable Efficient Knowledge Distillers”. In: *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)* (2023).
- [5] **Junfei Xiao**, Yutong Bai, Alan Yuille, and Zongwei Zhou. “Delving into Masked Autoencoders for Multi-Label Thorax Disease Classification”. In: *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*. 2023.
- [4] Qixin Hu, **Junfei Xiao**, Yixiong Chen, Shuwen Sun, Jie-Neng Chen, Alan Yuille, and Zongwei Zhou. “Synthetic Tumors Make AI Segment Tumors Better”. In: *NeurIPS Workshop* (2022).
- [3] **Junfei Xiao**, Lequan Yu, Zongwei Zhou, Yutong Bai, Lei Xing, Alan Yuille, and Yuyin Zhou. “CateNorm: Categorical Normalization for Robust Medical Image Segmentation”. In: *MICCAI Workshop on Domain Adaptation and Representation Transfer*. Springer. 2022, (**Best Paper Honorable Mention**).
- [2] **Junfei Xiao**, Longlong Jing, Lin Zhang, Ju He, Qi She, Zongwei Zhou, Alan Yuille, and Yingwei Li. “Learning from Temporal Gradient for Semi-supervised Action Recognition”. In: *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)* (2022).

- [1] Siqu Wang, Lei Li, Yufeng Chen, Yueping Wang, Wenguang Sun, **Junfei Xiao**, Dylan Wainwright, Tianmiao Wang, Robert J Wood, and Li Wen. “A bio-robotic remora disc with attachment and detachment capabilities for reversible underwater hitchhiking”. In: *2019 International Conference on Robotics and Automation (ICRA)*. 2019.

Honors and Awards

1st Place in Robust Vision Challenge - Semantic Segmentation Track (ECCV 2022)	2022
Best Paper Honorable Mention - DART (MICCAI Workshop)	2022
Academic Excellence Award	2016, 2017, 2018
JJWorld Scholarship	2017
National Scholarship (Top 0.1% national wide)	2016

Talks

Google Research Vision Reading Group (Topic: PaLM2-VAdapter)	April, 2024
Google Research (Topic: PaLM2-VAdapter)	Feb, 2024
MICCAI Workshop - DART (Topic: CateNorm)	Sept, 2022
JHU Computer Vision Seminar (Topic: Learn from Temporal Gradient)	Mar, 2022
JHU Computer Vision Seminar (Topic: CateNorm)	Mar, 2021

Service

Program Committee / Reviewer:

ICML 2021/2022 Workshop – Interpretable Machine Learning in Healthcare, **CVPR 2022 - 2024**, **ECCV 2022** , **ICCV 2023**, **NIPS 2023**, **ICLR 2024**

Technical Skills

Programming Languages: Python, Matlab, C/C++, SQL, Ocaml, Julia
Tools: L^AT_EX, Git, SolidWorks
Deep Learning Frameworks: Pytorch, Tensorflow
GRE: 162 (Verbal) + 170 (Math) + 3.5 (Writing)