# Junfei Xiao

## Baltimore, Maryland https://lambert-x.github.io

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2 410-949-7876 xiaojf97@gmail.com

#### Education

Johns Hopkins University Ph.D. in Computer Science

2022 -

Hopkins University

Baltimore, Maryland

Johns Hopkins University

Sep. 2019 - May 2021

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

Baltimore, Maryland

Beihang University

Sep. 2015 – June 2019

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

Beijing, China

Experience

Google Research
Student Researcher

July. 2023 – Present Mountain View, California

CCVL Lab, Johns Hopkins University Research Assistant, Advisor: Alan Yuille Sep. 2021 – Present

CCVL Lab, Johns Hopkins University

Baltimore, Maryland

June 2020 – Sep. 2021

Research Intern, Advisor: Alan Yuille

Baltimore, Maryland

## **Publications and Manuscripts**

- [11] **Junfei Xiao**, Boyu Wang, Shen Yan, Zheng Xu, and Alan Yuille. "Bridging frozen foundation models with Quantized Adapter". In: *Ongoing project with Google Research* (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] Siqi 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

${\bf 1st\ Place}$ 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

#### Service

Program Committee / Reviewer:

### **Technical Skills**

Programming Languages: Python, Matlab, C/C++, SQL, Ocaml, Julia

Tools: LATEX, Git, SolidWorks

**Deep Learning Frameworks:** Pytorch, Tensorflow **GRE:** 162 (Verbal) + 170 (Math) + 3.5 (Writing)