

Tyler LaBonte

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Education

GEORGIA INSTITUTE OF TECHNOLOGY Ph.D., Machine Learning	2021–Present
UNIVERSITY OF SOUTHERN CALIFORNIA B.S., Applied and Computational Mathematics, <i>magna cum laude</i>	2017–2021
Skills: Python, TensorFlow, PyTorch, Numpy, Linux CLI, Docker, Git, Vim, \LaTeX	

Selected Publications

1. [Task Shift: From Classification to Regression in Overparameterized Linear Models](#)
Tyler LaBonte*, Kuo-Wei Lai*, and Vidya Muthukumar (* denotes equal contribution)
AISTATS 2025
2. [The Group Robustness is in the Details: Revisiting Finetuning under Spurious Correlations](#)
Tyler LaBonte, John C. Hill, Xincheng Zhang, Vidya Muthukumar, and Abhishek Kumar
NeurIPS 2024
3. [Towards Last-layer Retraining for Group Robustness with Fewer Annotations](#)
Tyler LaBonte, Vidya Muthukumar, and Abhishek Kumar
NeurIPS 2023
4. [Quantifying the Unknown Impact of Segmentation Uncertainty on Image-Based Simulations](#)
Michael C. Krygier, Tyler LaBonte, Carianne Martinez, Chance Norris, Krish Sharma, *et al.*
Nature Communications, 12(1):5414, 2021

Industry Research Experience

MICROSOFT RESEARCH <i>Machine Learning Research Intern</i>	Redmond, WA 2025
– Investigated reasoning proficiency of multimodal vision-language models.	
GOOGLE <i>Machine Learning Research Intern</i>	Sunnyvale, CA 2023
– Developed techniques to leverage Gemini LLM to improve architecture-agnostic hardware-software code design.	
– Synthesized chain-of-thought and few-shot prompting strategies to generalize to data-scarce applications.	
MICROSOFT RESEARCH <i>Machine Learning Research Intern</i>	Redmond, WA 2021–2022
– Developed Transformer model for weakly supervised object detection with multiple instance learning.	
– Integrated pipeline into production system, enabling rapid delivery of new Windows Action Center capability.	

Selected Awards

DoD National Defense Science and Engineering Graduate Fellowship (\$170,000)	2021
NSF Graduate Research Fellowship (\$138,000—declined)	2021