# **Benlin Liu**

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#### **EDUCATION**

**University of Washington** 

Seattle, USA

PhD in Computer Science & Engineering

Start from Sep 2021

Affiliation: UW Graphics and Imaging Laboratory (GRAIL)

University of California, Los Angeles

Los Angeles, USA

M.S. in Computer Science

Sep 2019 - Jun 2021

**Tsinghua University** 

Beijing, China

B. Eng. in Electronic Engineering

Aug 2014 - Jun 2018

#### **PUBLICATIONS**

- 1. Zuyan Liu\*, **Benlin Liu**\*, Jiahui Wang, Guangyi Chen, Ranjay Krishna, Yongming Rao. Efficient Inference of Vision and Language Instruction-Following Models with Elastic Cache. In submission
- 2. Jiaxi Yang, Wenlong Deng, Benlin Liu, Yangsibo Huang, James Zou, Xiaoxiao Li. GMValuator: Similarity-based Data Valuation for Generative Models. In submission
- 3. Yushi Hu, **Benlin Liu**, Jungo Kasai, Yizhong Wang, Mari Ostendorf, Ranjay Krishna, Noah A Smith. TIFA: Accurate and Interpretable Text-to-Image Faithfulness Evaluation with Question Answering. ICCV'23
- 4. Wenliang Zhao, Yongming Rao, Zuyan Liu, **Benlin Liu**, Jie Zhou, Jiwen Lu. Unleashing Text-to-Image Diffusion Models for Visual Perception. ICCV'23
- 5. Yongming Rao, Wenliang Zhao, **Benlin Liu**, Jiwen Lu, Jie Zhou, Cho-Jui Hsieh. DynamicViT: Efficient Vision Transformers with Dynamic Token Sparsification, NeurIPS'21
- 6. **Benlin Liu\***, Yongming Rao\*, Yi Wei, Jiwen Lu, Jie Zhou, Cho-jui Hsieh. RandomRooms: Learning 3D Scene Representation from Synthetic Shapes and Randomized Layouts, ICCV'21
- 7. Xin Wang, **Benlin Liu\***, Thomas Huang\*, Fisher Yu, Xiaolong Wang, Trevor Darrell, Joseph Gonzalez. Frustratingly Simple Domain Adaptive Object Detection, ICCV'21
- 8. **Benlin Liu,** Yongming Rao, Jiwen Lu, Jie Zhou, Cho-jui Hsieh. Multi-Proxy Wasserstein Classifier for Image Classification, AAAI'21
- 9. **Benlin Liu**, Yongming Rao, Jiwen Lu, Jie Zhou, Cho-jui Hsieh. MetaDistiller: Network Self-Boosting via Meta-Learned Top-Down Distillation, ECCV'20

<sup>\*</sup> indicates equal contribution

10. Xu Zhao, Zhenming Yu, **Benlin Liu**, Yu Li, Hongwei Chen, Minghua Chen. A integrated optical neural network chip based on Mach-Zehnder interferometers. Asian Communication and Photonics 2018 (ACP2018)

## **Research Experience**

## University of Washington (Paul G. Allen School of Computer Science and Engineering)

Seattle, USA

Research Assistant to Prof. Ranjay Krishna

Sep 2021 – Present

Research Interest: Vision-Language Pretraining, Knowledge Transfer, Text-to-Image generation, Diffusion Model, Self-Supervised Learning, Large Language Model

### **UCLA (Department of Computer Science)**

Los Angeles, USA

Research Assistant to Prof. Cho-Jui Hsieh

Oct 2019 - Jun 2021

Research Interest: Visual Representation Learning, Learning with Less Supervision

#### **Working Experience**

| Intern at Momenta.ai                  | May 2018 – Jul 2018 |
|---------------------------------------|---------------------|
| Student Researcher at Google Deepmind | Jun 2023 – Oct 2023 |

#### **Academic Service**

Reviewer of NeurIPS 2021-2023, CVPR 2021-2023, ICLR 2022-2023, ICCV 2021,2023, ECCV 2022, WACV 2021 - 2023, AAAI 2021-2022

### **Honors and Awards**

**UW-Reality Lab Meta Fellowship** 

1st place in Momenta Lane Detection Challenge

Tsinghua Academic Excellence Award

1st place in 17th Electronic Design Contest of Tsinghua University

2nd Prize for the 32rd National Undergraduate Physics Olympic (Top 5%)

#### **ADDITIONAL INFORMATION**

Computer Skills: C/C++, Python, JAVA, Matlab, SQL, Bash, Latex, PyTorch, Tensorflow, Keras, Caffe, JAX

Languages: Mandarin Chinese (Native), English (Proficient, TOEFL: 109)