# WENHAO LI

School of Computer Science, Peking University

♦ Email: wenhaoli@pku.edu.cn ♦ Homepage: https://vegetebird.github.io/

♦ Phone: +86 15919445058 ♦ Birth: 1996, Zhejiang

#### RESEARCH INTEREST

## Computer Vision and Deep Learning

3D Human Pose and Shape Estimation in images/videos

### **EDUCATION**

Fifth-Year Ph.D. Student in Computer Science Peking University, China, Advisor: Prof. Hong Liu	2019.08 - Present
Bachelor of Engineering in Electrical Engineering and Automation Ningbo University, China, Rank: $1/63$	2015.08 - 2019.06
Visiting Scholar University of Trento, Italy, Advisor: Prof. Nicu Sebe	2023.07 - Present

### **PUBLICATIONS**

- 1. Wenhao Li, Hong Liu, Hao Tang, Pichao Wang, and Luc Van Gool. MHFormer: Multi-Hypothesis Transformer for 3D Human Pose Estimation. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022.
- 2. Wenhao Li, Hong Liu, Hao Tang, and Pichao Wang. Multi-Hypothesis Representation Learning for Transformer-Based 3D Human Pose Estimation. *Pattern Recognition* (PR), 2023.
- 3. Wenhao Li, Hong Liu, Runwei Ding, Mengyuan Liu, Pichao Wang, and Wenming Yang. Exploiting Temporal Contexts with Strided Transformer for 3D Human Pose Estimation. *IEEE Transactions on Multimedia (TMM)*, 2022.
- 4. Guoliang Hua\*, Hong Liu, **Wenhao Li\***, Qian Zhang, Runwei Ding, and Xin Xu. Weakly-supervised 3D Human Pose Estimation with Cross-view U-shaped Graph Convolutional Network. *IEEE Transactions on Multimedia* (*TMM*), 2022.
- 5. Yingxuan You, Hong Liu, Ti Wang, **Wenhao Li**, Runwei Ding, and Xia Li. Co-Evolution of Pose and Mesh for 3D Human Body Estimation from Video. *IEEE International Conference on Computer Vision (ICCV)*, 2023.
- Jianbing Wu, Hong Liu, Wei Shi, Mengyuan Liu, Wenhao Li. Style-Agnostic Representation Learning for Visible-Infrared Person Re-identification. IEEE Transactions on Multimedia (TMM), 2023.
- 7. Jialun Cai, Hong Liu, Runwei Ding, **Wenhao Li**, Jianbing Wu, and Miaoju Ban. HTNet: Human Topology Aware Network for 3D Human Pose Estimation. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2023.
- 8. Yingxuan You, Hong Liu, Xia Li, **Wenhao Li**, Ti Wang, and Runwei Ding. GATOR: Graph-Aware Transformer with Motion-Disentangled Regression for Human Mesh Recovery from a 2D Pose. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2023.
- 9. Ti Wang, Hong Liu, Runwei Ding, **Wenhao Li**, Yingxuan You, and Xia Li. Interweaved Graph and Attention Network for 3D Human Pose Estimation. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2023.

### **OPEN SOURCE**

Codes and models for my published papers are available on my GitHub:

- https://github.com/Vegetebird/MHFormer (400+ stars)
- https://github.com/Vegetebird/StridedTransformer-Pose3D (300+ stars)

## REVIEW SERVICES

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- IEEE International Conference on Computer Vision (ICCV)
- International Conference on Learning Representations (ICLR)
- Conference on Neural Information Processing Systems (NeurIPS)
- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Multimedia (TMM)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)

## **AWARDS & HONORS**

- National Scholarship ( <b>Top 2</b> %)	2022
<ul> <li>Merit Student Pacesetter of PKU (Top 3%)</li> </ul>	2022
<ul> <li>Outstanding Graduates of Zhejiang (Top 1%)</li> </ul>	2019
<ul> <li>Outstanding Undergraduate Thesis Award (TOP 5%)</li> </ul>	2019
<ul><li>President Scholarship (Top 10, highest school honor)</li></ul>	2018
– National Scholarship ( <b>Top 1</b> %)	2017
– National Scholarship ( <b>Top 1</b> %)	2016
- Meritorious Winner in Mathematical Contest in Modeling (MCM)	2018
– First Prize in National Undergraduate Electronic Design Contest	2017
- First Prize in Chinese Mathematics Competition (CMC)	2016
– Second Prize in China Undergraduate Mathematical Contest in Modeling (CUMCM)	2017
- Second Prize in China Undergraduate Mathematical Contest in Modeling (CUMCM)	2016
– First Place in Zhejiang Undergraduate Electronic Design Contest	2018
– First Place in Zhejiang Undergraduate Robot Contest	2017
- First Prize in Zhejiang Undergraduate Advanced Mathematics Competition	2016
- First Prize in Zhejiang Undergraduate Physics Contest	2016

## TECHNICAL SKILLS

Computer Languages	Python, MATLAB, $C/C++$
Software & Tools	PyTorch, LaTeX

# 李文豪

## 北京大学, 计算机学院

▶ +86 15919445058 ₩ 1996,浙江

# @ 研究方向

深度学习、计算机视觉、基于图像或视频的三维人体姿态与形态估计

# 参 教育背景

北京大学 2019.08 – 至今

博士研究生五年级在读 计算机应用技术,导师: 刘宏教授

宁波大学 2015.08 – 2019.06

学士自动化 (阳明创新班), 排名: 1/63

University of Trento 2023.07 – 至今

访问学者,导师: Prof. Nicu Sebe

## ■ 论文发表

1. **Wenhao Li**, Hong Liu, Hao Tang, Pichao Wang, and Luc Van Gool. MHFormer: Multi-Hypothesis Transformer for 3D Human Pose Estimation. *IEEE Conference on Computer Vision and Pattern Recognition* (*CVPR*), 2022.

- 2. **Wenhao Li**, Hong Liu, Hao Tang, and Pichao Wang. Multi-Hypothesis Representation Learning for Transformer-Based 3D Human Pose Estimation. *Pattern Recognition (PR)*, 2023.
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- 4. Guoliang Hua\*, Hong Liu, **Wenhao Li\***, Qian Zhang, Runwei Ding, and Xin Xu. Weakly-supervised 3D Human Pose Estimation with Cross-view U-shaped Graph Convolutional Network. *IEEE Transactions on Multimedia (TMM)*, 2022.
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- 8. Yingxuan You, Hong Liu, Xia Li, **Wenhao Li**, Ti Wang, and Runwei Ding. GATOR: Graph-Aware Transformer with Motion-Disentangled Regression for Human Mesh Recovery from a 2D Pose. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2023.
- 9. Ti Wang, Hong Liu, Runwei Ding, **Wenhao Li**, Yingxuan You, and Xia Li. Interweaved Graph and Attention Network for 3D Human Pose Estimation. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP*), 2023.

# **9** 开源代码

发表论文的代码和模型开源在我的 GitHub:

- https://github.com/Vegetebird/MHFormer (400+ stars)
- https://github.com/Vegetebird/StridedTransformer-Pose3D (300+ stars)

# ■ 审稿人

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- IEEE International Conference on Computer Vision (ICCV)
- International Conference on Learning Representations (ICLR)
- Conference on Neural Information Processing Systems (NeurIPS)
- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Multimedia (TMM)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)

# ♥ 奖项与荣誉

- 国家奖学金 (2%)	2022
- 北京大学三好学生标兵 (3%)	2022
- 浙江省优秀毕业生 (1%)	2019
<ul><li>- 优秀本科论文奖 (5%)</li></ul>	2019
- 校长奖学金 (10人,学校最高荣誉)	2018
- 国家奖学金 (1%)	2017
- 国家奖学金 (1%)	2016
- 美国大学生数学建模竞赛国际一等奖	2018
- 全国大学生电子设计竞赛国家一等奖	2017
- 全国大学生数学竞赛国家一等奖	2016
- 全国大学生数学建模竞赛国家二等奖	2017
- 全国大学生数学建模竞赛国家二等奖	2016
- 浙江省大学生电子设计竞赛一等奖	2018
- 浙江省大学生机器人竞赛一等奖(冠军)	2017
- 浙江省大学生高等数学竞赛一等奖	2016
- 浙江省大学生物理创新竞赛一等奖	2016

# ☎技能

编程语言 Python, MATLAB, C/C++ 软件工具 PyTorch, LaTeX