

LIN HUANG

Page: <https://linhuang17.github.io/> [Google Scholar](#)

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EDUCATION

State University of New York at Buffalo, Buffalo, USA *Jan. 2019 – Aug. 2023*

Doctorate of Philosophy in Computer Science and Engineering

- Advisor: Prof. Junsong Yuan

University of Southern California, Los Angeles, USA *Jan. 2017 – Dec. 2018*

Master of Science in Electrical Engineering

GPA: 4.0/4.0

- Masters Students Honors Fellow

Lanzhou University, Lanzhou, China *Sep. 2012 – Jun. 2016*

Bachelor of Engineering in Electronic Information Science and Technology

GPA: 4.57/5.00

- Outstanding Bachelor Thesis: Blind Per Tone Equalization Using Support Vector Machine for OFDM

RESEARCH INTERESTS

Human-centric Motion Perception/Analysis/Generation, Character Animation, Animatable Avatar, 6-DoF Object Pose Estimation, and 3D Reconstruction

WORK EXPERIENCE

NetEase Games, Redmond, WA, USA *Oct. 2023 - Present*

AI Engineer

Microsoft Azure AI, Redmond, WA, USA *May. 2022 - Aug. 2022*

Research Intern

- Supervisor: Dr. Chung-Ching Lin, Dr. Kevin Lin, Dr. Lin Liang, Dr. Lijuan Wang, Dr. Zicheng Liu
- 3D Hand Pose Estimation (**NVF[CVPR'23]**): Proposed the first 3D implicit representation-based unified solution to estimate camera-space 3D hand pose and noticeably outperforms existing methods for both absolute and relative hand pose estimation.

Reality Labs at Meta, Redmond, WA, USA *Dec. 2021 - Apr. 2022*

Part-Time Student Researcher

- Supervisor: Dr. Tomas Hodan
- Interaction Tracking (**NCF[ECCV'22]**): Proposed the first formulation using 3D implicit representation for 6D rigid object pose estimation given a single RGB image and noticeably outperforms existing methods especially in challenging cases with occlusion.

Reality Labs at Meta, Redmond, WA, USA *Aug. 2021 - Dec. 2021*

Research Intern

- Supervisor: Dr. Tomas Hodan

- Interaction Tracking

Y-tech Lab at Kwai, Seattle, WA, USA *May. 2020 - Aug. 2020*

Research Intern

- Supervisor: Dr. Jianchao Tan, Dr. Ji Liu

- 3D Pose Estimation (**Hand-Transformer[ECCV'20]**, **HOT-Net[MM'20]**): Proposed the very first models to connect the structured hand(-object) pose estimation tasks with the Transformer-based transduction frameworks in the NLP field.

SELECTED PUBLICATIONS ([GOOGLE SCHOLAR](#))

1. **Lin Huang**, *Chung-Ching Lin, Kevin Lin, Lin Liang, Lijuan Wang, Junsong Yuan, and Zicheng Liu*
Neural Voting Field for Camera-Space 3D Hand Pose Estimation
IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) 2023, Vancouver
[\[Project\]](#)[\[Paper\]](#)[\[Suppl.\]](#)[\[arXiv\]](#)[\[Code\]](#)[\[Video\]](#)
2. *Jiyang Li, Lin Huang, Siddharth Shah, Sean J Jones, Yincheng Jin, Dingran Wang, Adam Russell, Seokmin Choi, Yang Gao, Junsong Yuan, and Zhanpeng Jin*
SignRing: Continuous American Sign Language Recognition Using IMU Rings and Virtual IMU Data
ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**IMWUT**) 2023
[\[Paper\]](#)
3. **Lin Huang**, *Tomas Hodan, Lingni Ma, Linguang Zhang, Luan Tran, Christopher Twigg, Po-Chen Wu, Junsong Yuan, Cem Keskin, and Robert Wang*
Neural Correspondence Field for Object Pose Estimation
European Conference on Computer Vision (**ECCV**) 2022, Tel-Aviv
[\[Project\]](#)[\[Paper\]](#)[\[arXiv\]](#)[\[Code\]](#)
4. **Lin Huang***, *Boshen Zhang*, Zhilin Guo*, Yang Xiao, Zhiguo Cao, and Junsong Yuan*
Survey on Depth and RGB Image-based 3D Hand Shape and Pose Estimation
Virtual Reality and Intelligent Hardware (**VRIH**) 2021
[\[Paper\]](#)
5. **Lin Huang**, *Jianchao Tan, Jingjing Meng, Ji Liu, and Junsong Yuan*
HOT-Net: Non-Autoregressive Transformer for 3D Hand-Object Pose Estimation
ACM International Conference on Multimedia (**ACM MM**) 2020, Seattle
[\[Paper\]](#)[\[Video\]](#)
6. **Lin Huang**, *Jianchao Tan, Ji Liu, and Junsong Yuan*
Hand-Transformer: Non-Autoregressive Structured Modeling for 3D Hand Pose Estimation
European Conference on Computer Vision (**ECCV**) 2020, Glasgow
[\[Paper\]](#)[\[Video\]](#)
7. *Yujun Cai, Lin Huang, Yiwei Wang, Tat-Jen Cham, Jianfei Cai, Junsong Yuan, Jun Liu, Xu Yang, Yiheng Zhu, Xiaohui Shen, Ding Liu, Jing Liu, and Nadia Magnenat Thalmann*
Learning Progressive Joint Propagation for Human Motion Prediction
European Conference on Computer Vision (**ECCV**) 2020, Glasgow
[\[Paper\]](#)

PROFESSIONAL SERVICES

Conference Reviewer

- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)	2021'22'23'24
- European Conference on Computer Vision (ECCV)	2022'24
- International Conference on Computer Vision (ICCV)	2021'23
- ACM MULTIMEDIA (ACM MM)	2024'25
- IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)	2024'25
- IEEE International Conference on Image Processing (ICIP)	2022'23'24'25
- International Conference on Pattern Recognition (ICPR)	2024
- Asian Conference on Pattern Recognition (ACPR)	2025
- IEEE World Forum on Internet of Things (WF-IOT)	2020

Journal Reviewer

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- IEEE Transactions on Image Processing (TIP)
- International Journal of Computer Vision (IJCV)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Transactions on Instrumentation Measurement (TIM)
- The Visual Computer (TVCJ)
- Journal of Visual Communication and Image Representation (JVCI)
- Machine Vision and Applications (MVAP)
- Signal Processing: Image Communication (SPIC)

TEACHING

Teaching Assistant, State University of New York at Buffalo

- CSE531: Analysis of Algorithms I *Spring 2023*
- CSE191: Introduction to Discrete Structures *Spring 2021*
- CSE555: Introduction to Pattern Recognition *Fall 2020*
- CSE587: Data Intensive Computing *Spring 2020*

CONTESTS

National Undergraduate Electronic Design Contest, China

Summer 2015

Group Leader

- Wireless Video Communication Network
- The Second Prize of National Undergraduate Electronic Design Contest

HONORS & AWARDS

Masters Students Honors Fellow, USC Viterbi School of Engineering

2018

Outstanding Graduate, Lanzhou University

2016

Pacemaker to Merit Student, Lanzhou University

2013'14

First-class Scholarship, Lanzhou University

2014

Second-class Scholarship, Lanzhou University

2012'13