

LIN HUANG

Page: <https://linhuang17.github.io/>

Email: luang27@buffalo.edu

Phone: +1-213-590-1062

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

WORK EXPERIENCE

- NetEase Games**, Seattle, 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

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

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
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
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
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
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
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

CONTESTS

National Undergraduate Electronic Design Contest, China

Summer 2015

Group Leader

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

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*
- IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) *2024*
- IEEE International Conference on Image Processing (ICIP) *2022'23'24*
- IEEE World Forum on Internet of Things (WF-IOT) *2020*

Journal Reviewer

- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Transactions on Instrumentation Measurement (TIM)
- The Visual Computer (TVCI)
- 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	<i>Spring 2023</i>
- CSE191: Introduction to Discrete Structures	<i>Spring 2021</i>
- CSE555: Introduction to Pattern Recognition	<i>Fall 2020</i>
- CSE587: Data Intensive Computing	<i>Spring 2020</i>

HONORS & AWARDS

Masters Students Honors Fellow , USC Viterbi School of Engineering	<i>2018</i>
Outstanding Graduate , Lanzhou University	<i>2016</i>
Pacemaker to Merit Student , Lanzhou University	<i>2013'14</i>
First-class Scholarship , Lanzhou University	<i>2014</i>
Second-class Scholarship , Lanzhou University	<i>2012'13</i>