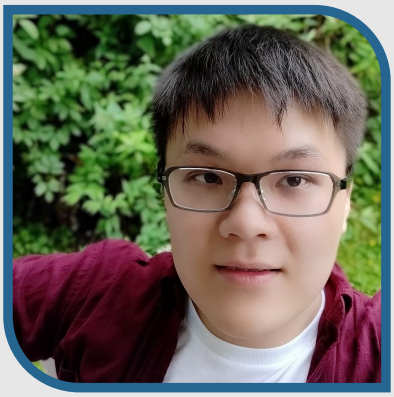


Erwin Wu, Ph.D

Expert Researcher (Lab Director),
Huawei Research Japan

Guest Senior Researcher,
Keio Media Design

Germany

Feb 11, 1994

erwinwu211@gmail.com

+81 80 2087 5753

Homepage
https://www.erwin-wu.com/

Keywords

Outgoing | Talkative | HCI | AR/VR | Multilingual | Soccer | Table Tennis | Future Pose | Computer Vision

Languages

German
Chinese
Japanese
English
Spanish (ing...)

Skills

Programming:
C/C++, C#, Python, Java, JS, R, Swift

Tools:
PyTorch, TensorFlow, Matlab, Unity, Unreal, Blender, Maya, Cinema4D

About

Erwin Wu is a Researcher at Huawei Japan and a Guest Researcher at Keio University. He received his B.Sc.CS (with Honor) from Shanghai Jiao Tong University and his Ph.D. from Tokyo Institute of Technology. Before joining Huawei, he was an Assistant Professor at Tokyo Institute of Technology and worked at CMU and Sony CSL. His research interests are focused on the intersection of computer vision, HCI, VR/AR visualization, machine learning, with a particular emphasis on 3D human pose.

Education

2017-2022 **Tokyo Institute of Technology** — PhD of Computer Science
School of Computing, Department of Computer Science
Supervised by Prof. Hideki Koike

2013-2017 **Shanghai Jiao Tong University** — Bachelor of C.S. with Honor **(Top 5%)**
School of Electronic Information and Electrical Engineering
Supervised by Prof. Xubo Yang

Work Experience

2023.06 - Now **Huawei Research Japan** — Expert Researcher (Lab Director)
Tokyo Research Center, CG Lab

2023.06 - Now **Keio University** — Guest Senior Researcher
Graduate School of Media Design

2022.09 - 2023.06 **Tokyo Institute of Technology** — Research Assistant Professor
Department of Computer Science

2022.10 - 2023.03 **Carnegie Mellon University** — Visiting Assistant Professor
The Robotics Institute, collaborate with Prof. Kris Kitani

2020.04 - 2023.04 **Sony Computer Science Laboratory** — Researcher
3D Piano Hand Pose Project with Dr. Furuya Shinichi

Other Experience

2022.12 - 2023.2 **Meta Reality Lab** — Internship
Supervised by Dr. Saito Shunsuke

2020.06 - 2020.09 **Huawei Research Japan** — Internship
Tokyo Research Center, Digital Human Project

2019.11 - 2020.03 **Carnegie Mellon University** — Exchange Student
The Robotics Institute, supervised by Prof. Kris Kitani

2018.09 - 2022.09 **Tokyo Institute of Technology** — Teaching Assistant
Teaching the class "Data Structures & Algorithms"

2015.09 - 2016.07 **Kyoto University** — Exchange Student
School of Informatics and Mathematical Science

Fellowships & Scholarships

2020	JSPS "Gakushin" Fellowship for Young Scientist (DC1)	JSPS
2019	TSUBAME Doctoral Student Scholarship	TokyoTech
2016	Excellent International Studend Scholarship	SJTU
2015	Scholarship for Excellent Exchange Student	JASSO
2013	International Student Government Scholarship B	Shanghai Gov.

Academic Services

Reviewer	UIST2021-2024, CHI2022-2024, IMWUT2022-2024
Reviewer	ISMAR2022-2023, VR2023-2024,
Editor	IEEE Transactions on Multimedia
Area Chair	CHI 2025, UIST 2024
PC Member	MVA 2023, 2025, MIRU 2024, WISS 2021

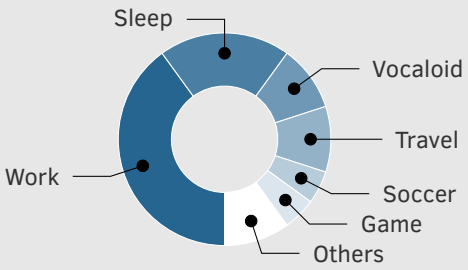
Erwin Wu, Ph.D

Expert Researcher (Lab Director),
Huawei Research Japan

Guest Senior Researcher,
Keio Media Design

Research Interest –

Daily



Top 10 Representative Publications

Full the full 50+ publications, please visit my Google scholar.

2024.11 **SolePoser: Full Body Pose Estimation using a Single Pair of Insole Sensor**
Erwin Wu, Rawal Khirodkar, Hideki Koike, Kris Kitani (UIST 2024)

2024.03 **ARpenSki: Augmenting Ski Training with Direct and Indirect Postural Visualization**
Takeshi Matsumoto and Erwin Wu (IEEE VR 2024)

2023.12 **SkiTech: An Alpine Skiing and Snowboarding Dataset of 3D Body Pose, Sole Pressure, and Electromyography**
Erwin Wu et al. (MM 2023)

2023.10 **PianoSyncAR: Enhancing Piano Learning through Visualizing Synchronized Hand Pose Discrepancies in Augmented Reality**
Ruofan Liu, Erwin Wu et al. (ISMAR 2023)

2023.05 **OmniSense: Exploring Novel Input Sensing and Interaction Techniques on Mobile Device with an Omni-Directional Camera**
Hui-Shyong Yeo, Erwin Wu et al. (CHI 2023)

2023.01 **Marker-Removal Networks To Collect Precise 3D Hand Data for RGB-Based Estimation and Its Application in Piano**
Erwin Wu, Hayato Nishioka et al. (WACV 2023)

2021.05 **SPinPong - Virtual Reality Table Tennis Skill Acquisition using Visual, Haptic and Temporal Cues**
Erwin Wu, Mitski Piekenbrock et al. (TVCG 2021)

2020.10 **Back-Hand-Pose: 3D Hand Pose Estimation for Wrist-worn Devices via Dorsum Deformation Analysis**
Erwin Wu, Ye Yuan et al. (UIST 2020)

2020.03 **FuturePong: Real-time Table Tennis Trajectory Forecasting using Pose Prediction Network**
Erwin Wu and Hideki Koike. (CHI'20)

2019.01 **FuturePose - Mixed Reality Martial Arts Training Using Real-Time 3D Human Pose Forecasting with a RGB Camera**
Erwin Wu and Hideki Koike. (WACV 2019)

Honors & Awards

2023.03	AIP Network Director Award	8th JST CREST AIP Challenge
2022.09	Best Poster Award	10th JST CREST Symposium
2022.05	Seiichi Tejima Research Award	Tokyo Institute of Technology
2022.01	AIP Network Director Award	7th JST CREST AIP Challenge
2019.11	Best Paper Award	VRCAI 2019
2019.03	Best Research Demo Runner-up	IEEE VR 2019
2018.12	Best Poster Award Honorable Mention	VRST 2018
2017.07	Outstanding Graduates Award	Shanghai Jiao Tong U.

Patents

2023 US Patents, Measurement support device, method and computer program product, US Patent App.

2022 US Patents, Measurement support device, method and computer program product, US Patent App.

2021 Japanese Patents, Information Processing System and its Program, Application Number: 2021-143847.

2021 Japanese Patents, Information Processing System and its Program, Application Number: 2021-172499.

2020 US Patents, Measurement support device, method and computer program product, US Patent App.