

Tsung-Han (Patrick) Wu

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Education

- Ph.D. in Computer Science** Aug. 2023 – Present
University of California, Berkeley
- Advisor: Prof. Trevor Darrell, Prof. Joseph E. Gonzalez
 - Affiliation: BAIR, Sky Computing Lab
- M.S. in Computer Science** Sep. 2020 – Jun. 2022
National Taiwan University (NTU)
- Advisor: Prof. Winston H. Hsu
 - Affiliation: Communication and Multimedia Lab (CMLab)
 - Honors: 2021 Foxconn Technology Award, 2022 IPPR Outstanding MS Thesis Award
- B.S. in Computer Science** Sep. 2016 – Jun. 2020
National Taiwan University (NTU)
- GPA: 4.18/4.3 (Overall), 4.24/4.3 (CS); Rank: 6/117 (Top 5%)
 - Honors: Dean's List Award x3 (F'16, S'17, F'19)

Selected Publications (* denotes equal contribution) [\[Google Scholar Page\]](#)

Visual Reasoning (2023–Now)

Developing grounded visual reasoning through verification and correction in vision-language and diffusion models.

- [1] [Generate, but Verify: Reducing Hallucination in VLM with Retrospective Resampling](#) NeurIPS 2025
Tsung-Han Wu, Heekyung Lee, Jiaxin Ge, Joseph E. Gonzalez, Trevor Darrell, David M. Chan
- [2] [Visual Haystacks: A Vision-Centric Needle-In-A-Haystack Benchmark](#) ICLR 2025
Tsung-Han Wu, Giscard Biambay, Jerome Quenum, Ritwik Gupta, Joseph E. Gonzalez, Trevor Darrell, David M. Chan
- [3] [Self-correcting LLM-controlled Diffusion Models](#) CVPR 2024
Tsung-Han Wu*, Long Lian*, Joseph E. Gonzalez, Boyi Li, Trevor Darrell
- [4] [See, Say, and Segment: Teaching LMMs to Overcome False Premises](#) CVPR 2024
Tsung-Han Wu*, Giscard Biambay*, David M. Chan, Lisa Dunlap, Ritwik Gupta, Xudong Wang, Joseph E. Gonzalez, Trevor Darrell

Human-Centered AI (2025–Now)

Advancing human–AI interaction under real-world dynamics with a focus on human interruption and preference analyses.

- [5] [Are Large Reasoning Models Interruptible?](#) ICML 2026
Tsung-Han Wu*, Mihran Miroyan*, David M Chan, Trevor Darrell, Narges Norouzi, Joseph E Gonzalez
- [6] [Search Arena: Analyzing Search-Augmented LLMs](#) ICLR 2026
Mihran Miroyan* Tsung-Han Wu*, Logan King, Tianle Li, Jiayi Pan, Xinyan Hu, Wei-Lin Chiang, Anastasios N. Angelopoulos, Trevor Darrell, Narges Norouzi, Joseph E. Gonzalez

Low-Cost Perception (2019–2023)

Reducing perception cost with limited labels (active learning), domain adaptation, and cheap sensors.

- [7] [D2ADA: Dynamic Density-aware Active Domain Adaptation](#) ECCV 2022
Tsung-Han Wu, Yi-Syuan Liou, Shao-Ji Yuan, Hsin-Ying Lee, Tung-I Chen, Kuan-Chih Huang, Winston H. Hsu

- [8] [MonoDTR: Monocular 3D Object Detection with Depth-Aware Transformer](#) CVPR 2022
Kuan-Chih Huang, **Tsung-Han Wu**, Hung-Ting Su, Winston H. Hsu
- [9] [ReDAL: Region-based and Diversity-aware Active Learning](#) ICCV 2021
Tsung-Han Wu, Yueh-Cheng Liu, Yu-Kai Huang, Hsin-Ying Lee, Hung-Ting Su, Ping-Chia Huang, Winston H. Hsu

Work Experience

- Research Scientist Intern** May 2024 – Aug 2024
FAIR, Meta Inc. Supervisor: Prof. Kate Saenko
- Developed automated data mining engine for fine-grained, referring segmentation models ([SAM3](#)).
- System Administrator** Feb 2018 – Jun 2020
Dept. of Computer Science and Information Engineering (CSIE), NTU Supervisor: Prof. Hsin-Mu Tsai
- Head of Mail Services (2018–2019): Maintained department-wide mail servers and automated service deployments.
 - SysAdmin Lead (2019–2020): Improved system backup and monitoring; led the CS department's data center relocation.
- Data Scientist Intern** Jul 2019 – Aug 2019
AICS Team, ASUS Inc.
- Designed OCR enhancement tools and built detection models for document analysis tasks.

Teaching Experience

- Teaching Assistant** 2019 – 2020 Spring
CS2311: Network and System Administration, NTU
- Lab Instructor (Spring 2019): Taught shell scripting and Linux kernel; created two assignments. (Best TA Award)
 - Head TA (Spring 2020): Led the TA team and co-planned syllabus; managed labs, assignments, and exams.
- Teaching Assistant** Fall 2019
EE5184: Machine Learning, NTU
- Designed two Kaggle-based programming assignments, hand-written homework, and final exam problems.

Services

- Workshop Organizer, 4th/5th Multimodal Foundation Models (MMFM) @ ICCV '25/CVPR '26 2025–2026
- Workshop Coordinator, 1st BAIR-NCKU Summer AI Workshop Summer 2025
- Conference/Journal Reviewers, at CVPR, ECCV, ICCV, NeurIPS, ICLR, ICML, and more Present

Awards

- IPPR Outstanding MS Thesis Award (Top 3 Computer Vision Master Thesis in Taiwan) Aug. 2022
- Foxconn Technology Award (Top 19 applied students in Taiwan, 250K NTD scholarship) Dec. 2021
- Best Teaching Assistant Awards, at NTU EECS Spring'19
- Dean's List Award, at NTU CSIE (For top 5% students); 3x Recipient Fall'16, Spring'17, Fall'19