- Barcelona, Spain (Online). International Committee on Computational Linguistics.
- Jennifer Ockerman and Amy Pritchett. 2000. A review and reappraisal of task guidance: Aiding workers in procedure following. *International Journal of Cognitive Ergonomics*, 4(3):191–212.
- Jennifer J Ockerman and Amy R Pritchett. 1998. Preliminary investigation of wearable computers for task guidance in aircraft inspection. In *Digest of Papers*. Second International Symposium on Wearable Computers (Cat. No. 98EX215), pages 33–40. IEEE.
- OpenAI. 2022. Introducing whisper. https://openai.com/research/whisper. Accessed: 2023-10-21.
- OpenAI. 2023a. Gpt-4 technical report.
- OpenAI. 2023b. Gpt-4v(ision) system card. https://openai.com/research/gpt-4v-system-card. Accessed: 2023-10-21.
- Aishwarya Padmakumar, Jesse Thomason, Ayush Shrivastava, Patrick Lange, Anjali Narayan-Chen, Spandana Gella, Robinson Piramuthu, Gokhan Tur, and Dilek Hakkani-Tur. 2022. Teach: Task-driven embodied agents that chat. *Proceedings of the AAAI Conference on Artificial Intelligence*, 36(2):2017–2025.
- Zhiliang Peng, Wenhui Wang, Li Dong, Yaru Hao, Shaohan Huang, Shuming Ma, and Furu Wei. 2023. Kosmos-2: Grounding multimodal large language models to the world.
- Hamed Pirsiavash and Deva Ramanan. 2012. Detecting activities of daily living in first-person camera views. In 2012 IEEE conference on computer vision and pattern recognition, pages 2847–2854. IEEE.
- Alec Radford, Jong Wook Kim, Chris Hallacy, Aditya Ramesh, Gabriel Goh, Sandhini Agarwal, Girish Sastry, Amanda Askell, Pamela Mishkin, Jack Clark, Gretchen Krueger, and Ilya Sutskever. 2021a. Learning transferable visual models from natural language supervision. *CoRR*, abs/2103.00020.
- Alec Radford, Jong Wook Kim, Chris Hallacy, Aditya Ramesh, Gabriel Goh, Sandhini Agarwal, Girish Sastry, Amanda Askell, Pamela Mishkin, Jack Clark, et al. 2021b. Learning transferable visual models from natural language supervision. In *International conference on machine learning*, pages 8748–8763. PMLR.
- Arvin Christopher C Reyes, Neil Patrick A Del Gallego, and Jordan Aiko P Deja. 2020. Mixed reality guidance system for motherboard assembly using tangible augmented reality. In *Proceedings of the 2020 4th International Conference on Virtual and Augmented Reality Simulations*, pages 1–6.
- Fadime Sener, Dibyadip Chatterjee, Daniel Shelepov, Kun He, Dipika Singhania, Robert Wang, and Angela Yao. 2022. Assembly101: A large-scale multi-view

- video dataset for understanding procedural activities. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, pages 21096–21106.
- Mohit Shridhar, Jesse Thomason, Daniel Gordon, Yonatan Bisk, Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, and Dieter Fox. 2020. ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks. In *The IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*.
- Gunnar A Sigurdsson, Abhinav Gupta, Cordelia Schmid, Ali Farhadi, and Karteek Alahari. 2018. Charadesego: A large-scale dataset of paired third and first person videos. *arXiv preprint arXiv:1804.09626*.
- Yu-Chuan Su and Kristen Grauman. 2016. Detecting engagement in egocentric video. In *Computer Vision–ECCV 2016: 14th European Conference, Amsterdam, The Netherlands, October 11-14, 2016, Proceedings, Part V 14*, pages 454–471. Springer.
- Xuan Wang, SK Ong, and Andrew Yeh-Ching Nee. 2016. Multi-modal augmented-reality assembly guidance based on bare-hand interface. *Advanced Engineering Informatics*, 30(3):406–421.
- Xingjiao Wu, Luwei Xiao, Yixuan Sun, Junhang Zhang, Tianlong Ma, and Liang He. 2021. A survey of human-in-the-loop for machine learning. *CoRR*, abs/2108.00941.
- Rowan Zellers, Jiasen Lu, Ximing Lu, Youngjae Yu, Yanpeng Zhao, Mohammadreza Salehi, Aditya Kusupati, Jack Hessel, Ali Farhadi, and Yejin Choi. 2022. Merlot reserve: Neural script knowledge through vision and language and sound. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, pages 16375–16387.
- Rowan Zellers, Ximing Lu, Jack Hessel, Youngjae Yu, Jae Sung Park, Jize Cao, Ali Farhadi, and Yejin Choi. 2021. Merlot: Multimodal neural script knowledge models. *Advances in Neural Information Processing Systems*, 34:23634–23651.
- Lingzhi Zhang, Shenghao Zhou, Simon Stent, and Jianbo Shi. 2022. Fine-grained egocentric hand-object segmentation: Dataset, model, and applications. In *European Conference on Computer Vision*, pages 127–145. Springer.
- Luowei Zhou, Chenliang Xu, and Jason J. Corso. 2017. Procnets: Learning to segment procedures in untrimmed and unconstrained videos. *CoRR*, abs/1703.09788.