Xin (Eric) Wang

Engineering 2 Building, Room 343A 1156 High Street, Santa Cruz, CA 95064 https://eric-xw.github.io xwang366@ucsc.edu

CURRENT Director, UCSC ERIC Lab 09/2020 - Present EMPLOYMENT Assistant Professor, Computer Science and Engineering 09/2020 - Present 12/2020 - Present

Affiliate Faculty, UCSC NLP MS Program

Jack Baskin School of Engineering

University of California, Santa Cruz, CA, USA

EDUCATION University of California, Santa Barbara, CA, USA 2015 - 2020

Ph.D. in Computer Science

Advisors: William Yang Wang, Yuan-Fang Wang

Additional thesis committee members: Matthew Turk, Xifeng Yan

Zhejiang University, Hangzhou, China 2011 - 2015

B.Eng. in Computer Science

Top 100 Excellent Undergraduate Students of the Year, China Computer Federation

(2014, top 100 in China)

RESEARCH Natural Language Processing, Computer Vision, and Machine Learning, with an **INTERESTS** emphasis on Multimodality and Embodied Agents.

PREVIOUS Google Research, Mountain View, CA, USA

EMPLOYMENT Research Intern Jun. 2019 - Sep. 2019

Mentors: Sujith Ravi, Zornitsa Kozareva

Facebook AI Research, Menlo Park, CA, USA

 $Graduate\ Researcher$ Apr. 2019 - Jun. 2019

Mentors: Xinlei Chen, Marcus Rohrbach, Dhruv Batra

Microsoft Research, Redmond, WA, USA

Research Intern Jun. 2018 - Sep. 2018

Mentors: Lei Zhang, Asli Celikyilmaz, Jianfeng Gao

Adobe Research, San Francisco, CA, USA

Research Intern Jun. 2017 - Sep. 2017

Mentors: Geoffrey Oxholm, Oliver Wang, Eli Shechtman, Mike Lukac

Adobe Research, San Francisco, CA, USA

Research Intern Jun. 2016 - Sep. 2016

Mentor: Geoffrey Oxholm

Exacloud Inc., Hangzhou, China

Dec. 2014 - Mar. 2015 Software Engineer Intern

The University of Hong Kong, Hong Kong

Visiting Research Assistant Jul. 2014 - Sep. 2014

Advisor: Yizhou Yu

PUBLICATIONS The conferences and journals listed below are top-tier ones in the corresponding research areas: natural language processing (ACL, NAACL, EMNLP, EACL), computer vision (CVPR, ICCV, ECCV, TPAMI, IJCV), AI and machine learning (NeurIPS, ICLR, ICML, AAAI). The acceptance rates are usually 15-25% for all accepted papers and less than 5% for oral presentations.

Conference and Journal Papers

- [53] Kaiwen Zhou, Kaizhi Zheng, Connor Pryor, Yilin Shen, Hongxia Jin, Lise Getoor, Xin Eric Wang. "ESC: Exploration with Soft Commonsense Constraints for Zero-shot Object Navigation", International Conference on Machine Learning (ICML), 2023.
- [52] Yue Fan, Winson Chen, Tongzhou Jiang, Chun Zhou, Yi Zhang, Xin Eric Wang. "Aerial Vision-and-Dialog Navigation". Findings of 60th Annual Meeting of the Association for Computational Linguistics (ACL), 2023.
- [51] Jialu Wang, Xinyue Gabby Liu, Zonglin Di, Yang Liu, Xin Eric Wang. "T2IAT: Measuring Valence and Stereotypical Biases in Text-to-Image Generation". Findings of 60th Annual Meeting of the Association for Computational Linguistics (ACL), 2023.
- [50] Weixi Feng, Xuehai He, Tsu-Jui Fu, Varun Jampani, Arjun Akula, Pradyumna Narayana, Sugato Basu, Xin Eric Wang, William Yang Wang. "Training-Free Structured Diffusion Guidance for Compositional Text-to-Image Synthesis". International Conference on Learning Representations (ICLR), 2023.
- [49] Yujie Lu, Weixi Feng, Wanrong Zhu, Wenda Xu, Xin Eric Wang, Miguel Eckstein, William Yang Wang. "Neuro-Symbolic Procedural Planning with Commonsense Prompting". International Conference on Learning Representations (ICLR), 2023. Spotlight Presentation
- [48] Xuehai He, Xin Eric Wang. "Multimodal Graph Transformer for Multimodal Question Answering". The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL), 2023.
- [47] Wanrong Zhu, An Yan, Yujie Lu, Wenda Xu, Xin Eric Wang, Miguel Eckstein, William Yang Wang. "Visualize Before You Write: Imagination-Guided Open-Ended Text Generation". The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL), 2023.
- [46] Wanrong Zhu, Xin Eric Wang, An Yan, Miguel Eckstein, William Yang Wang. "ImaginE: An Imagination-Based Automatic Evaluation Metric for Natural Language Generation". The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL), 2023.
- [45] Xuehai He, Chunyuan Li, Pengchuan Zhang, Jianwei Yang, Xin Eric Wang. "Parameter-efficient Fine-tuning for Vision Transformers". Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI), 2023.
- [44] Swati Jindal, Xin Eric Wang. "CUDA-GHR: Controllable Unsupervised Domain Adaptation for Gaze and Head Redirection", IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2023.
- [43] Kaizhi Zheng, Xiaotong Chen, Odest Chad Jenkins, Xin Eric Wang. "VLMbench: A Compositional Benchmark for Vision-and-Language Manipulation". 2022 Conference on Neural Information Processing Systems (NeurIPS), 2022.
- [42] Xuehai He, Diji Yang, Weixi Feng, Tsu-Jui Fu, Arjun Akula, Varun Jampani, Pradyumna Narayana, Sugato Basu, William Yang Wang, Xin Eric Wang. "CPL: Counterfactual Prompt Learning for Vision and Language Models".

- The 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022.
- [41] Kaiwen Zhou, **Xin Eric Wang**. "FedVLN: Privacy-preserving Federated Vision-and-Language Navigation". 17th European Conference on Computer Vision (ECCV), 2022.
- [40] Tsu-Jui Fu, **Xin Eric Wang**, William Yang Wang. "Language-Driven Artistic Style Transfer". 17th European Conference on Computer Vision (ECCV), 2022.
- [39] Jialu Wang, **Xin Eric Wang**, Yang Liu. "Understanding Instance-Level Impact of Fairness Constraints". *Thirty-ninth International Conference on Machine Learning (ICML)*, 2022.
- [38] Yujie Lu, Wanrong Zhu, **Xin Eric Wang**, Miguel Eckstein, William Yang Wang. "Imagination-Augmented Natural Language Understanding". 2022 Annual Conference of the North American Chapter of the Association for Computational Linquistics (NAACL), 2022. **Oral Presentation**
- [37] Wanrong Zhu, Yuankai Qi, Pradyumna Narayana, Kazoo Sone, Sugato Basu, Xin Eric Wang, Qi Wu, Miguel Eckstein, William Yang Wang. "Diagnosing Vision-and-Language Navigation: What Really Matters". 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2022. Oral Presentation
- [36] Juncheng Li, Junlin Xie, Long Qian, Linchao Zhu, Siliang Tang, Fei Wu, Yi Yang, Yueting Zhuang, **Xin Eric Wang**. "Compositional Temporal Grounding with Structured Variational Cross-Graph Correspondence Learning". *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022.
- [35] Tsu-Jui Fu, Xin Eric Wang, Scott Grafton, Miguel Eckstein, William Yang Wang. "M3L: Language-based Video Editing via Multi-Modal Multi-Level Transformer". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.
- [34] Jing Gu, Eliana Stefani, Qi Wu, Jesse Thomason, Xin Eric Wang. "Vision-and-Language Navigation: A Survey of Tasks, Methods, and Future Directions". 60th Annual Meeting of the Association for Computational Linguistics (ACL), 2022.
- [33] Jialu Wang, Yang Liu, **Xin Eric Wang**. "Assessing Multilingual Fairness in Pretrained Multimodal Representations". Findings of 60th Annual Meeting of the Association for Computational Linguistics (ACL), 2022.
- [32] Tianyi Luo, Rui Meng, **Xin Eric Wang**, Yang Liu. "Interpretable Research Replication Prediction via Variational Contextual Consistency Sentence Masking". Findings of 60th Annual Meeting of the Association for Computational Linguistics (ACL), 2022.
- [31] Jialu Wang, Yang Liu, **Xin Eric Wang**. "Are Gender-Neutral Queries Really Gender-Neutral? Mitigating Gender Bias in Image Search". *The 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2021. **Oral Presentation**
- [30] Linjie Li, Jie Lei, Zhe Gan, Licheng Yu, Yen-Chun Chen, Rohit Pillai, Yu Cheng, Luowei Zhou, Xin Eric Wang, William Yang Wang, Tamara Lee Berg, Mohit Bansal, Jingjing Liu, Lijuan Wang, Zicheng Liu. "VALUE: A Multi-Task Benchmark for Video-and-Language Understanding Evaluation". 2021 Conference on Neural Information Processing Systems (NeurIPS), 2021.
- [29] Jiayi Wei, Xilian Li, Yi Zhang, Xin Eric Wang. "Visual Question Rewriting for Increasing Response Rate". The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2021.

- [28] Wanrong Zhu, **Xin Eric Wang**, Tsu-Jui Fu, An Yan, Pradyumna Narayana, Kazoo Sone, Sugato Basu, William Yang Wang. "Multimodal Text Style Transfer for Outdoor Vision-and-Language Navigation". The 16th Annual Meeting of the European chapter of the Association for Computational Linguistics (EACL), 2021
- [27] An Yan, Xin Eric Wang, Tsu-Jui Fu, William Yang Wang. "L2C: Describing Visual Differences Needs Semantic Understanding of Individuals". The 16th Annual Meeting of the European chapter of the Association for Computational Linguistics (EACL), 2021.
- [26] Tsu-Jui Fu, Xin Eric Wang, Scott Grafton, Miguel Eckstein, William Yang Wang. "SSCR: Iterative Language-Based Image Editing via Self-Supervised Counterfactual Reasoning". The 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020. Oral Presentation
- [25] Wanrong Zhu, **Xin Eric Wang**, William Yang Wang. "Towards Understanding Sample Variance in Visually Grounded Language Generation: Evaluations and Observations". The 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020.
- [24] Jiannan Xiang, Xin Eric Wang, William Yang Wang. "Learning to Stop: A Simple yet Effective Approach to Urban Vision-Language Navigation". Findings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020.
- [23] Tsu-Jui Fu, Xin Eric Wang, Matthew Peterson, Scott Grafton, Miguel Eckstein, William Yang Wang. "Counterfactual Vision-and-Language Navigation via Adversarial Path Sampling". 16th European Conference on Computer Vision (ECCV), 2020. Spotlight Presentation
- [22] Xin Eric Wang*, Vihan Jain*, Eugene Ie, William Yang Wang, Zornitsa Kozareva, Sujith Ravi. "Environment-agnostic Multitask Learning for Natural Language Grounded Navigation". 16th European Conference on Computer Vision (ECCV), 2020.
- [21] Wenqiao Zhang, Xin Eric Wang, Siliang Tang, Haizhou Shi, Haocheng Shi, Jun Xiao, Yueting Zhuang, William Yang Wang. "Relational Graph Learning for Grounded Video Description Generation". ACM Multimedia Conference, 2020.
- [20] Juncheng Li, Xin Wang, Siliang Tang, Haizhou Shi, Fei Wu, Yueting Zhuang, William Yang Wang. "Unsupervised Reinforcement Learning of Transferable Meta-Skills for Embodied Navigation". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020.
- [19] Yuankai Qi, Qi Wu, Peter Anderson, Xin Wang, William Yang Wang, Chunhua Shen, Anton van den Hengel. "REVERIE: Remote Embodied Visual Referring Expression in Real Indoor Environments". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020. Oral Presentation
- [18] Xin Wang, Qiuyuan Huang, Asli Celikyilmaz, Jianfeng Gao, Dinghan Shen, Yuan-Fang Wang, William Yang Wang, Lei Zhang. "Vision-Language Navigation Policy Learning and Adaptation". *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2020.
- [17] Pengda Qin, Xin Wang, Wenhu Chen, Chunyun Zhang, Weiran Xu, William Yang Wang. "Generative Adversarial Zero-Shot Relational Learning for Knowledge Graphs". Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI), 2020. Oral Presentation

- [16] Xin Wang*, Jiawei Wu*, Junkun Chen, Lei Li, Yuan-Fang Wang, William Yang Wang. "VATEX: A Large-Scale, High-Quality Multilingual Dataset for Video-and-Language Research". *Intenational Conference on Computer Vision (ICCV)*, 2019. Oral Presentation
- [15] Ming Jiang, Qiuyuan Huang, Lei Zhang, Xin Wang, Pengchuan Zhang, Zhe Gan, Jana Diesner, Jianfeng Gao. "TIGEr: Text-to-Image Grounding for Image Caption Evaluation". 2019 Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP), 2019.
- [14] Xin Wang, Qiuyuan Huang, Asli Celikyilmaz, Jianfeng Gao, Dinghan Shen, Yuan-Fang Wang, William Yang Wang, Lei Zhang. "Reinforced Cross-Modal Matching and Self-Supervised Imitation Learning for Vision-Language Navigation". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019. Best Student Paper Award (1/5160 ≈ 0.02%)
- [13] Da Zhang, Xiyang Dai, Xin Wang, Yuan-Fang Wang, Larry Davis. "MAN: Moment Alignment Network for Natural Language Moment Retrieval via Iterative Graph Adjustment". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019.
- [12] Jiawei Wu, Xin Wang, William Yang Wang. "Self-Supervised Dialogue Learning". 57th Annual Meeting of the Association for Computational Linguistics (ACL), 2019.
- [11] Hong Wang, Xin Wang, Wenhan Xiong, Mo Yu, Xiaoxiao Guo, Shiyu Chang, William Yang Wang. "Self-Supervised Learning for Contextualized Extractive Summarization". 57th Annual Meeting of the Association for Computational Linguistics (ACL), 2019.
- [10] Dinghan Shen, Asli Celikyilmaz, Yizhe Zhang, Liqun Chen, Xin Wang, Jianfeng Gao, Lawrence Carin. "Towards Generating Long and Coherent Text with Multi-Level Latent Variable Models". 57th Annual Meeting of the Association for Computational Linguistics (ACL), 2019.
- [9] Jiawei Wu, Xin Wang, William Yang Wang. "Extract and Edit: An Alternative to Back-Translation for Unsupervised Neural Machine Translation". 17th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT), 2019. Oral Presentation
- [8] Xin Wang, Jiawei Wu, Da Zhang, Yu Su, William Yang Wang. "Learning to Compose Topic-Aware Mixture of Experts for Zero-Shot Video Captioning". Thirty-Third AAAI Conference on Artificial Intelligence (AAAI), 2019. Oral Presentation
- [7] Xin Wang*, Wenhan Xiong*, Hongmin Wang, William Yang Wang. "Look Before You Leap: Bridging Model-Free and Model-Based Reinforcement Learning for Planned-Ahead Vision-and-Language Navigation". European Conference on Computer Vision (ECCV), 2018.
- [6] Wenhu Chen, Jianshu Chen, Yu Su, Xin Wang, Dong Yu, Xifeng Yan, William Yang Wang. "XL-NBT: A Cross-lingual Neural Belief Tracking Framework". Conference on Empirical Methods in Natural Language Processing (EMNLP), 2018.
- [5] Xin Wang*, Wenhu Chen*, Yuan-Fang Wang, William Yang Wang. "No Metrics Are Perfect: Adversarial Reward Learning for Visual Storytelling". 56th Annual Meeting of the Association for Computational Linguistics (ACL), 2018. Oral Presentation

- [4] Xin Wang, Wenhu Chen, Jiawei Wu, Yuan-Fang Wang, William Yang Wang. "Video Captioning via Hierarchical Reinforcement Learning". *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018.
- [3] Xin Wang, Yuan-Fang Wang, William Yang Wang. "Watch, Listen, and Describe: Globally and Locally Aligned Cross-Modal Attentions for Video Captioning". 16th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT), 2018.
- [2] Da Zhang, Xiyang Dai, Xin Wang, Yuan-Fang Wang. "S3D: Single Shot multi-Span Detector via Fully 3D Convolutional Network". 29th British Machine Vision Conference (BMVC), 2018. Oral Presentation
- [1] **Xin Wang**, Geoffrey Oxholm, Da Zhang, Yuan-Fang Wang. "Multimodal Transfer: A Hierarchical Deep Convolutional Neural Network for Fast Artistic Style Transfer". *IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2017.

PhD Dissertation

 Xin Wang. "Closing the Loop Between Language and Vision for Embodied Agents", PhD Dissertation, UC Santa Barbara, 2020.

Patents

[1] Geoffrey Oxholm, **Xin Wang**. "Multimodal style-transfer network for applying style features from multi-resolution style exemplars to input images". *US Patent* 10,565,757, 2020.

HONORS	&
AWARDS	

Amazon Alexa Prize Award (TaskBot)	2022-2023
Amazon Alexa Prize Award (SocialBot)	2022-2023
Amazon Alexa Prize Award (SimBot)	2022-2023
Google Faculty Research Award	2022
AAII Interdisciplinary Research Award	2022
Outstanding Publication Award, UCSB CS Department	2020
CVPR Best Student Paper Award $(1/5160 \approx 0.02\%)$	2019
Adobe Research Fellowship Finalist	2019
Outstanding Graduates, Zhejiang University	2015
Top 100 Excellent Undergraduate Student of the Year Award, China	Computer Fed-
eration (Top 100 in China)	2014
National Endeavor Scholarship, Ministry of Education, China	2012 - 2014
First Prize Outstanding Student Scholarship, Zhejiang University	2013 - 2014
Merit Student Award, Zhejiang University	2013 - 2014
Student Leadership Award, Zhejiang University	2013
Activity Achievement Scholarship, Zhejiang University	2012

GRANTS

- [12] PI, eBay Gift Grant, \$60,000, 2023-2024.
- [11] PI, Adobe Gift Grant, \$15,000, 2023.
- [10] PI, Amazon Alexa Prize Award (TaskBot), \$250,000, 2022-2023.
- [9] PI, Amazon Alexa Prize Award (SocialBot), \$250,000, 2022-2023.
- [8] PI, Amazon Alexa Prize Award (SimBot), \$250,000, 2022-2023.
- [7] PI, Google Faculty Research Award, \$100,000, 2022-2023 (Co-PI: William Wang, my portion: \$50,000).

- [6] PI, AAII Interdisciplinary Research Award, \$22,253 (three-month GSR support), 2022.
- [5] PI, COR Faculty Allowance Award, \$2,000, 2023.
- [4] PI, UCSC Faculty Research Grant, \$2,000, 2023.
- [3] PI, UCSC New Faculty Research Grant, \$2,000, 2022.
- [2] PI, Google Cloud Research Credits, \$5,000, 2021.
- [1] PI, UCSC New Faculty Research Grant, \$1,500, 2021.

SERVICE Area Chair (or Senior Program Committee)

- Thirty-seventh Conference on Neural Information Processing Systems (NeurIPS), 2023
- The 61st Annual Meeting of the Association for Computational Linguistics (ACL), 2023
- Eleventh International Conference on Learning Representations (ICLR), 2023
- The 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022
- The 60th Annual Meeting of the Association for Computational Linguistics (ACL), 2022
- The 2022 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2022
- The 2nd Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 12th International Joint Conference on Natural Language Processing (AACL-IJCNLP), 2022
- The 31st International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence (IJCAI-ECAI), 2022
- Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI), 2022
- The 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2021
- The 30th International Joint Conference on Artificial Intelligence (IJCAI), 2021
- The 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020

Session Chair

- The 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022
- The 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020 (Language Grounding to Vision, Robotics and Beyond)
- AAAI Conference on Artificial Intelligence (AAAI), 2019 (Natural Language Processing)

Organizer (or Chair)

- 4th Workshop on Spatial Language Understanding and Grounded Communication for Robotics (SpLU-RoboNLP), EMNLP 2023
- 4th Workshop on Closing the Loop Between Vision and Language (CLVL), ICCV 2021
- Workshop on Human Interaction for Robotic Navigation, ICCV 2021

- 2nd Workshop on Advances in Language and Vision Research (ALVR), NAACL 2021
- From VQA to VLN: Recent Advances in Vision-and-Language Research Tutorial, CVPR 2021
- 1st Workshop on Advances in Language and Vision Research (ALVR), ACL 2020
- Workshop on Language & Vision with applications to Video Understanding (LVVU), CVPR 2020
- Tutorial on Self-Supervised Deep Learning for NLP, AACL-IJCNLP 2020
- 3rd Workshop on Closing the Loop Between Vision and Language (CLVL), ICCV 2019

Program Committee (or Reviewer)

- Annual Meeting of the Association for Computational Linguistics (ACL)
- Conference on Empirical Methods in Natural Language Processing (EMNLP)
- Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- International Conference on Computer Vision (ICCV)
- European Conference on Computer Vision (ECCV)
- International Journal of Computer Vision (IJCV)
- Conference on Neural Information Processing Systems (NeurIPS)
- International Conference on Learning Representations (ICLR)
- AAAI Conference on Artificial Intelligence (AAAI)
- Conference on Robot Learning (CoRL)
- International Joint Conference on Natural Language Processing (IJCNLP)
- The SIGNLL Conference on Computational Natural Language Learning (CoNLL)
- Workshop on Scene Graph Representation and Learning (SGRL), ICCV 2019
- Combined Workshop on Spatial Language Understanding & Grounded Communication for Robotics (SpLU-RoboNLP), NAACL 2019
- Workshop on e-Commerce and NLP (ECNLP), The Web Conference (WWW) 2019
- Southern California Natural Language Processing Symposium, 2018

University Service

- Graduate Admissions Committee, UCSC CSE Department, 2022
- NLP Faculty Search Committee, UCSC CSE Department, 2022
- Graduate Admissions Committee, UCSC CSE Department, 2021

TALKS	Building Generalizable, Efficient, and Trustworthy Embodied Agents • University of California, Irvine	Mar 2023
	• University of Southern California	Feb 2023
	King Abdullah University of Science and Technology	Feb 2023
	• Peking University	Dec 2022
	 Efficient Transfer Prompt Learning of Vision and Language Models Adobe Research 	Aug 2022
	Advances in Vision-and-Language Research Beyond Performance • Fudan University, virtual	Mar 2022
	• USC Information Sciences Institute, virtual	Feb 2022
	• Microsoft Research, virtual	Nov 2021
	Fairness and Causality in Vision and Language Research • Stanford University, virtual	Oct 2021
	Tackling Data Scarcity in Vision and Language • NAACL 2021 Multimodal AI Workshop, virtual	Jun 2021
	• Arizona State University, virtual	Feb 2021
	Towards Generalizable Navigation Learning • Jiangmen, virtual	Sep 2020
	AI Technology Review, virtual	Aug 2020
	Close The Loop Between Language and Vision for Embodied Agents • Simon Fraser University, virtual	Apr 2020
	• Rensselaer Polytechnic Institute, virtual	Apr 2020
	• Peking University, virtual	Mar 2020
	• Tsinghua University, virtual	Mar 2020
	• University of California, Santa Cruz, CA	Mar 2020
	• University of Rochester, Rochester, NY	Feb 2020
	• Toyota Technological Institute at Chicago, Chicago, IL	Jan 2020
	Reinforced Cross-Modal Matching and Self-Supervised Imitation Learning	
	Language Navigation ● GPU Technology Conference (GTC), virtual	Mar 2020
	Go Beyond English: Multilingual Language Grounding in Vision • ICCV 2019 Workshop on Person In Context, Seoul, South Korea	Oct 2019
	VATEX: A Large-Scale, High-Quality Multilingual Dataset for Video-and Research	d- $Language$
	• ACL 2020 Workshop on Advances in Language and Vision Research virtual	h (ALVR), Jul 2020
	\bullet CVPR 2020 Workshop on Language & Vision with applications to derstanding (LVVU), virtual	Video Un- Jun 2020
	• ICCV 2019 Workshop on Closing the Loop Between Vision and (CLVL), Seoul, South Korea	Language Oct 2019

	• Robin.ly, Long Beach, CA	Jul 2
	• Facebook AI, Menlo Park, CA	Jun 2
	• Jiangmen, virtual	May 2
TEACHING	Instructor, UC Santa Cruz CSE 244B: Machine Learning for Natural Language Processing	Winter 2
	Instructor, UC Santa Cruz CSE 142: Machine Learning	Fall 2
	Instructor, UC Santa Cruz CSE 142: Machine Learning	Spring 2
	Instructor, UC Santa Cruz CSE 244B: Machine Learning for Natural Language Processing	Winter 2
	Instructor, UC Santa Cruz CSE 142: Machine Learning	Fall 2
	Instructor, UC Santa Cruz CSE 290C: Multimodal Deep Learning	Spring 2
	Instructor, UC Santa Cruz CSE 142: Machine Learning	Winter 2
	Co-Instructor, UC Santa Cruz CSE 280V: Seminar on Computer Vision	Fall 2
	Guest Lecturer, UC Santa Cruz CSE 200: Research & Teaching in CSE	Winter 2
	Guest Lecturer, UC Santa Barbara CS 281B: Computer Vision and Image Analysis	Winter 2
	Teaching Assistant, UC Santa Barbara CS 190I: Introduction to Natural Language Processing	Winter 2
	Teaching Assistant, UC Santa Barbara CS 180: Computer Graphics	Fall 2
	Teaching Assistant, UC Santa Barbara CS 48: Computer Science Project	Winter 2
	Teaching Assistant, UC Santa Barbara CS 32: Problem Solving with C++	Fall 2
MENTORING	PhD Students • Yue Fan (PhD student, UCSC)	2021-pres
		ZUZI-Pres
		2021 222
	 Jing Gu (PhD student, UCSC) Xuehai He (PhD student, UCSC) 	2021-pres 2021-pres

Kaiwen Zhou (PhD student, UCSC)
Jialu Wang (PhD candidate, UCSC, AAII Fellowship)
Yujie Lu (PhD student, UCSB)
Weixi Feng (PhD student, UCSB)
Wanrong Zhu (PhD candidate, UCSB)
Tsu-Jui Fu (PhD candidate, UCSB)
2021-present
2021-present
2019-present
2019-present

Undergraduate & MS Students

- Saaket Agashe (MS student, UCSC)
- Dhananjay Sonawane (MS student, UCSC)
- Shree Vignesh S (MS student, UCSC)
- Dhananjay Sonawane (MS student, UCSC)
- Winson Chen (MS student, UCSC)
- Diji Yang (MS student, UCSC)
- Joseph Rodrigues (MS student, UCSC)
- Lyn Qiu (MS student, SJTU)
- Jiayi Wei (MS student, UCSC. Next: Google)
- An Yan (MS student, UCSD. Next: UCSD PhD student)
- Gabby Liu (Undergraduate, UCSC)
- Austin Chen (Undergraduate, UCSC)
- Tongzhou Jiang (Undergraduate, UCSC. Next: CMU MS student)
- Chun Zhou (Undergraduate, UCSC. Next: UCLA MS student)
- Peiqi Su (Undergraduate, UCSC. Next: NYU MS student)
- Kenan Jiang (Undergraduate, UC Berkeley)
- Zhen Zhang (Undergraduate, Tsinghua University)
- Yunchao Zhang (Undergraduate, Zhejiang University)
- Yuhang He (Undergraduate, Zhejiang University)
- Jiannan Xiang (Undergraduate, USTC. Next: CMU MS student)

PhD & MS Committees

- Connor Pryor (PhD Thesis Committee, UCSC)
- Geetanjali Rakshit (PhD Thesis Committee, UCSC)
- Swati Jindal (PhD Thesis Committee, UCSC)
- Tianyi Luo (PhD Thesis Committee, UCSC)
- Joseph Rodrigues (MS Project Committee Chair, UCSC)
- Chuangbo Tong (MS Project Committee Chair, UCSC)
- Omkar Patil (MS Project Committee, UCSC)
- Yusu Wang (MS Project Committee, UCSC)
- Siman Wang (MS Project Committee, UCSC)
- Andrea Vitek (MS Project Committee, UCSC)
- Jiayi Wei (MS Project Committee, UCSC)

SELECTED PRESS COVERAGE

- "How can EMNLP 2021 help to shape reality? On language models, stereotypes and biases mitigation at 360°", Italy Scholar, July 10, 2022, LINK.
- "Team of researchers win the public benchmark phase of new Alexa Prize competition", UCSC NEWSCENTER, May 3, 2022, LINK.
- "Ethics and algorithms", UC Santa Cruz Magazine, October, 2021, LINK
- "CVPR 2019 Attracts 9K Attendees; Best Papers Announced; ImageNet Honoured 10 Years Later", Synced, June 18, 2019, LINK (Other media coverage: VentureBeat, IEEE Computer Society, Noozhawk, UCSB Current)
- "New Multilingual Video Description Dataset VATEX Receives Three Strong Accepts at ICCV", Synced, July 29, 2019, LINK
- "Cloak: Remove Unwanted Objects in Video", Adobe Research Blog, December 11, 2017, LINK
- "Adobe tries its hand at turning photos into paintings with AI-powered Artistic Eye", Digitaltrends, March 7, 2017, LINK
- "ACL 2018 Highlights: Understanding Representations and Evaluation in More Challenging Settings", AYLIEN, LINK