Cheng-Fu Yang

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EDUCATION & EXPERIENCE

University of California, Los Angeles   Sep. 2022 – Present
Ph.D. in Computer Science; Advisor: *Kai-Wei Chang*

National Taiwan University   Sep. 2016 – Jun. 2020
B.S. in Electrical Engineering

Research Intern   Jul. 2024 – Sep. 2024
Topic: Constituting Policies for Language Agents
Amazon; Mentor: *Weitong Ruan*

Research Intern   Jul. 2023 – Sep. 2023
Topic: Diffusion Policies for Embodied Agents
Amazon; Mentor: *Feng Gao*

Research Intern   Apr. 2022 – Jun. 2023
Topic: Representation Learning for Instruction Following Agents
Microsoft Research; Mentor: *Yen-Chun Chen*

Research Assistant   Sep. 2020 – Jun. 2022
National Taiwan University; Advisor: *Yu-Chiang Frank Wang*

Collaborative Research Project Participant   Dec. 2020 – Sep. 2021
Carnegie Mellon University; Mentor: *Yao-Hung Hubert Tsai*; Advisor: *Ruslan Salakhutdinov*, *Louis-Philippe Morency*

PUBLICATIONS

Cheng-Fu Yang, Haoyang Xu, Te-Lin Wu, Xiaofeng Gao, Kai-Wei Chang, and Feng Gao.   NeurIPS OWA Workshop, 2024
  "Planning as Inpainting: A Generative Framework for Realistic Embodied Path Planning"

Silin Meng, Yiwei Wang, **Cheng-Fu Yang**, Nanyun Peng and Kai-Wei Chang.   EMNLP, 2024
  "LLM-A*: Large Language Model Enhanced Incremental Heuristic Search on Path Planning"

Zi-Yi Dou, **Cheng-Fu Yang**, Xueqing Wu, Kai-Wei Chang and Nanyun Peng.   EMNLP, 2024
  "Reflection-Reinforced Self-Training for Language Agents"

Cheng-Fu Yang, Yen-Chun Chen, Jianwei Yang, Xiyang Dai, Lu Yuan,
  Yu-Chiang Frank Wang, and Kai-Wei Chang.   EMNLP 2023
  "LACMA: Language-Aligning Contrastive Learning with Meta-Actions for Embodied Instruction Following"

Wan-Cyuan Fan, **Cheng-Fu Yang**, Chiao-An Yang and Yu-Chiang Frank Wang.   AAAI 2023
  "Target-free Text-guided Image Manipulation"

Cheng-Fu Yang, Yao-Hung Hubert Tsai, Wan-Cyuan Fan, Ruslan Salakhutdinov,
  Louis-Philippe Morency, and Yu-Chiang Frank Wang.   NeurIPS 2022
  "Paraphrasing is all you need for novel object captioning"

Chih-Chun Yang, **Cheng-Fu Yang**, Wan-Cyuan Fan, and Yu-Chiang Frank Wang.   AAAI 2022
  "Cross-Modal Mutual Learning for Audio-Visual Speech Recognition and Manipulation"

Chiao-An Yang, Cheng-Yo Tan, Wan-Cyuan Fan, **Cheng-Fu Yang**, Meng-Lin Wu, and Yu-Chiang Frank Wang.   CVPR 2022
  "Scene graph expansion for semantics-guided image outpainting"

Cheng-Fu Yang*, Wan-Cyuan Fan*, Fu-En Yang, and Yu-Chiang Frank Wang.   CVPR 2021
  "Layouttransformer: Scene layout generation with conceptual and spatial diversity"

MANUSCRIPT

Cheng-Fu Yang, Da Yin and Kai-Wei Chang.   In Progress
  "VL Akinator: Constructing Interpretable Decision Trees for Few-shot Fine-grained Classification"

Cheng-Fu Yang, Christos Christodoulopoulos, Thanh Tran, Weitong Ruan and Kai-Wei Chang.   In Progress
  "Constituting Precedents for Few-shot Text-to-Image RAI Evaluation"

RESEARCH INTEREST

Representation Learning for agent planning and interaction.

Vision and Language representation learning for generation and reasoning.

AWARDS AND HONORS

First Prize, Institute for Information Industry Enterprise Award at Meichu Hackathon	Sep. 2019
Dean's List, National Taiwan University	Sep. 2019
Dean's List, National Taiwan University	Jan. 2017

TEACHING EXPERIENCES & PROFESSION SERVICES

Teaching Assistant, UCLA   Fall 2024
Advanced Natural Language Processing; Instructor: Violet Peng

Teaching Assistant, UCLA   Fall 2023
Introduction to Computer Science; Instructor: David Smallberg

Teaching Assistant, National Taiwan University   Fall 2021
Deep Learning for Computer Vision; Instructor: Yu-Chiang Frank Wang

Teaching Assistant, National Taiwan University   Fall 2019 & Spring 2020
Machine Learning; Instructor: Hung-Yi Lee

Conference Reviewer
CVPR, ECCV, ICCV, NeurIPS, ACL, EMNLP