# YIFAN JIANG

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# **Education Background**

University of Southern California (USC)Los Angeles, USAPh.D. in Computer Science08/2023~Current

• Advisor: Dr. Jay Pujara

University of Southern California (USC)

Los Angeles, USA

M.S. in Computer Science Overall GPA: 3.9/4.0 01/2022~12/2023

• Advisor: Dr. Filip Ilievski

Southern University of Science and Technology (SUSTech)

B.S. in Computer Science

Overall GPA: 3.78/4.0

Shenzhen, China
09/2017~06/2021

• Advisor: Dr. Xuan Song

University of California, Berkeley (UCB)

San Francisco, USA

Exchange program in Computer Science Overall GPA: 4.0/4.0 01/2020~05/2020

# **Experience**

Amazon Prime Video Seattle, USA Research Intern 05/2025~08/2025

• Developed VideoP2R, a process-aware reinforcement fine-tuning (RFT) framework for Video-Language Models, integrating a two-step Chain-of-Thought (CoT) annotation pipeline with process-aware Group Relative Policy Optimization (PR-GRPO) to disentangle perception and reasoning.

• Conducted large-scale RFT training and evaluation across seven video reasoning benchmarks, achieving SOTA accuracy and demonstrating robust improvements through process-annotated CoT data and separate perception/reasoning rewards.

Hippocratic AI Palo Alto, USA Research Intern 05/2024~08/2024 **Information Sciences Institute, USC** Los Angeles, USA 05/2022~08/2023 Research Assistant Los Angeles, USA Computer Science Department, USC **Teaching Assistant** 06/2022~12/2022 **SUSTech-Tokyo Joint Research Center for Super Smart City** Shenzhen, China Research Assistant 01/2021~12/2021

#### **Selected Publication**

- MARVEL: Multidimensional Abstraction and Reasoning through Visual Evaluation and Learning Yifan Jiang\*, Jiarui Zhang\*, Kexuan Sun\*, Zhivar Sourati, Kian Ahrabian, Kaixin Ma, Filip Ilievski, Jay Pujara [NeurIPS DB 2024] Conference on Neural Information Processing Systems, 2024.
- RED QUEEN: Safeguarding Large Language Models against Concealed Multi-Turn Jailbreaking <u>Yifan Jiang</u>, Kriti Aggarwal, Subhabrata Mukherjee, Tanmay Laud, Kashif Munir, Jay Pujara [ACL 2025 Findings] The 63rd Annual Meeting of the Association for Computational Linguistics.
- BRAINTEASER: Lateral Thinking Puzzles for Large Language Models
   <u>Yifan Jiang</u>, Filip Ilievski, Kaixin Ma, Zhivar Sourati
   [EMNLP 2023] Conference on Empirical Methods in Natural Language Processing, 2023.

#### Transferring Procedural Knowledge across Commonsense Tasks

Yifan Jianq, Kaixin Ma, Filip Ilievski

[WNU@ACL 2023] ACL 2023 5th Workshop on Narrative Understanding.

[ECAI 2023] European Conference on Artificial Intelligence, 2023.

# Semeval-2024 task 9: Brainteaser: A novel task defying common sense

Yifan Jiang, Filip Ilievski, Kaixin Ma

[SemEval@NAACL 2024] The 18th International Workshop on Semantic Evaluation, 2024.

# COLUMBUS: A Visual Question Answering Benchmark to Evaluate Cognitive Lateral Understanding through Multiple-choice reBUSes

Koen Kraaijveld, **Yifan Jiang**, Kaixin Ma, Filip Ilievski

[AAAI 2025] AAAI Conference on Artificial Intelligence, 2025.

# • Engage for All: Making Ordinary Image Descriptions Appealing Again!

Yuyan Chen, <u>Yifan Jiang</u>, Li Zhou, Jinghan Cao, Yu Guan, Ming Yang, Qingpei Guo [ICCV 2025] International Conference on Computer Vision, 2025.

#### • FIRE: Food Image to REcipe generation

Prateek Chhikara, Dhiraj Chaurasia, Yifan Jiang, Omkar Masur

[WACV 2024] IEEE/CVF Winter Conference on Applications of Computer Vision, 2024.

## • SRPO: Enhancing multimodal Ilm reasoning via reflection-aware reinforcement learning

Zhongwei Wan, Zhihao Dou, Che Liu, Yu Zhang, Dongfei Cui, Qinjian Zhao,

Hui Shen, Jing Xiong, Yi Xin, <u>Yifan Jiang</u>, Yangfan He, Mi Zhang, Shen Yan

[NeurIPS 2025] Conference on Neural Information Processing Systems, 2025.

# Recent Advances in Large Language Model Benchmarks against Data Contamination: From Static to Dynamic Evaluation

Simin Chen, Yiming Chen, Zexin Li, Yifan Jiang, Zhongwei Wan, Yixin He,

Dezhi Ran, Tianle Gu, Haizhou Li, Tao Xie, Baishakhi Ray

[EMNLP 2025] Conference on Empirical Methods in Natural Language Processing, 2025.

#### • The curious case of nonverbal abstract reasoning with multi-modal large language models

Kian Ahrabian, Zhivar Sourati, Kexuan Sun, Jiarui Zhang, Yifan Jiang, Fred Morstatter, Jay Pujara [COLM 2024] Conference On Language Modeling, 2024.

#### ARN: Analogical Reasoning on Narratives

Zhivar Sourati, Filip Ilievski, Pia Sommerauer, Yifan Jiang

[TACL 2024] Transactions of the Association for Computational Linguistics, 2024.

## Service

- [2025] Reviewer for EMNLP, ACL, NeurIPS, COLING, COLING\_demo, ICLR, IEEE\_SSCI, Analogy-ANGLE Workshop II
- [2024] Reviewer for SemEval, LREC-COLING, Analogy-ANGLE Workshop(co-located with IJCAI)

### Honors

- The Honor Roll Merit Scholarship, Southern University of Science and Technology, 2018,2019,2020
- Computer Science Outstanding Graduate Award, Southern University of Science and Technology, 2021
- Computer Science Honor Program, University of Southern California, 2022
- ISI Distinguished Graduate Student Researcher Fellowship Award, University of Southern California, 2023