Yunhao Fang

yufo26@ucsd.edu / seerkfang.github.io / San Diego, California

EDUCATION

Zhejiang University

Sept 2018 - Jun 2022

Bachelor in Electronical and Information Sciences

GPA: 3.92/4.00

Summer school at University of Illinois at Urbana-Champaign

University of California, San Diego

Sept 2022 - Dec 2023 (expected)

Master in Computer Sciences and Engineering

RESEARCH EXPERIENCE

University of California, San Diego

Research Assistant

Advisor: Professor Hao Su

Sept 2022 - now

PUBLICATIONS

Conference Publications

Distillation Large Vision-Language Model with Out-of-Distribution Generalizability

Xuanlin Li*, Yunhao Fang*, Minghua Liu, Zhan Ling, Zhuowen Tu, Hao Su

In International Conference on Computer Vision (ICCV), 2023. Arxiv; Code

• Investigate the constraints and interactions involved in the process of distilling Vision-Language models (e.g. CLIP) using lightweight models (e.g. ResNet18). Propose approaches to enhance large model distillation.

Deductive Verification of Chain-of-Thought Reasoning

Zhan Ling*, Yunhao Fang*, Xuanlin Li, Zhiao Huang, Hao Su

In Neural Information Processing Systems (NeurIPS), 2023. Arxiv; Code

- Explore the limitations of existing LLMs when applied to problem solving and generating trustworthy content.
- · Propose a Natural Program format that empowers LLMs to engage in step-by-step deductive verification with incontext learning, which is further complemented by the strategy of unanimity-plurality to generate reliable output.

Unleashing the Creative Mind: Language Model as Hierarchical Policy For Improved **Exploration on Challenging Problem Solving**

Zhan Ling, Yunhao Fang, Xuanlin Li, Tongzhou Mu, Roland Memisevic, Hao Su, et al.

In Submission, 2023 Arxiv

- Framing an LLM as a hierarchical policy through in-context learning to solve MATH hard problems.
- Propose an effective tournament based method to select among the explored groups.

AWARDS & HONORS

National Scholarship, the highest honor in China, 2022.

Mathematical Contest in Modeling: Meritorious Winner, 2022.

First-class Scholarship, Zhejiang University, 2021.

Huang Hong, Wu Xiaobei Scholarship (3 out of 2000), Zhejiang University, 2020.

INTERNSHIPS

Shanghai Artificial Intelligence Laboratory

Nov 2021 – Jun 2022

Research Internship

- Maintainer of the open-source codebase mmtracking.
- Doing research about open-world tracking.

Hangzhou Humpback Whale Technology Co., Ltd

Algorithm Engineer Internship

- Propose the monocular RGB image-based motion estimation and correction algorithm (Patent).
- Design and make an RFIC-based remote sensing platform.

TEACHING

Teaching Assistant: CSE 275 Deep Learning for 3D Data at UC San Diego, Fall 2023.