# Chia-Hsiang (Aaron) Kao

ck696@cornell.edu | Google Scholar | Website

## **Education**

Cornell University, Ithaca, NY

2023 - Present

- Ph.D. Student in Computer Science
- Advisor: Professor Bharath Hariharan

National Yang-Ming Chiao-Tung University, Taipei, Taiwan

2015 - 2022

• Doctor of Medicine

### **Research Interest**

#### **Current Research**

- Symbolic-Visual Verifier
  - Enabling test-time visual reasoning with symbolic languages.
  - Advisor: Professor Bharath Hariharan

#### **Previous Research**

- Learning Algorithms: meta-learning<sub>[C2]</sub> and learning algorithm<sub>[S1,C6]</sub>
- Sequence Modeling: DNA<sub>[C3,C4]</sub> and satellite video<sub>[C5]</sub>
- AI4Science: biology<sub>[C3,C4]</sub>, medical imaging<sub>[C1]</sub>, and remote sensing<sub>[C5,S2]</sub>

## **Publications**

IC 21 Towards LLM Agants for Forth Observation

[S.2] Towards LLM Agents for Earth Observation.
Chia-Hsiang Kao, Wenting Zhao, Shreelekha Revankar, Samuel Speas, Snehal Bhagat, Rajeev Datta, Cheng Perng Phoo, Utkarsh Mall, Carl Vondrick, Kavita Bala, Bharath Hariharan
Preprint

- [C.6] Counter-Current Learning: A Biologically Plausible Dual Network Approach for Deep Learning. Chia-Hsiang Kao, Bharath Hariharan NeurIPS 2024
- [C.5] AllClear: A Comprehensive Dataset and Benchmark for Cloud Removal in Satellite Imagery Chia-Hsiang Kao\*, Hangyu Zhou\*, Cheng Perng Phoo, Utkarsh Mall, Bharath Hariharan, Kavita Bala NeurIPS Datasets and Benchmarks Track 2024
- [C.4] Caduceus: Bi-Directional Equivariant Long-Range DNA Sequence Modeling Yair Schiff, Chia-Hsiang Kao, Aaron Gokalsan, Tri Dao, Albert Gu, Volodymyr Kuleshov ICML 2024
- [C.3] Advancing DNA Language Models: The Genomics Long-Range Benchmark Chia-Hsiang Kao\*, Evan Trop\*, McKinley Polen\*, Yair Schiff\*, Bernardo P. de Almeida, Aaron Gokaslan, Thomas Pierrot, Volodymyr Kuleshov AAAI (workshop) 2023
- [C.2] MAML Is a Noisy Contrastive Learner in the Classification Chia-Hsiang Kao, Wei-Chen Chiu, Pin-Yu Chen ICLR 2022
- [S.1] MAML Is a Noisy Contrastive Learner in the Classification **Chia-Hsiang Kao**, Wei-Chen Chiu, Pin-Yu Chen *Preprint*
- [C.1] Demystifying T1-MRI to FDG18-PET Image Translation via Representational Similarity Chia-Hsiang Kao, Yong-Sheng Chen, Li-Fen Chen, Wei-Chen Chiu MICCAI 2021

## **Honors & Awards**

• Student Travel Award, MICCAI 2021

2021

- Undergraduate Research Fellowship, National Science and Technology Council, Taiwan 2018, 2020
- Summer Research Fellowship, National Health Research Institutes

2018

## **Services**

**Conference Reviewer**: AAAI[25], AISTATS[25], AutoML[22], ICML[25], ICLR[25], NeurIPS[21,24] **Journal Reviewer**: CVIU (2022), Comput. Electr. Eng. (2024), IEEE TETCI (2024)