

Kuansheng Chen

EDUCATION

University of Illinois Urbana-Champaign, Urbana, Illinois

Aug. 2023 – Jun. 2024

Exchange student in Computer Science

National Chiao Tung University, Hsinchu, Taiwan

Sept. 2019 - Jun. 2024

Bachelor of Science in Computer Science

Advisor: Yen-Yu Lin and Chien-Yao Wang

RESEARCH INTERESTS

My research interests lie in **object detection** and **object tracking**. I enjoy solving real-world problems such as building detectors that can successfully detect both known classes and unknown classes objects. I am currently working on Open World Object Detection that enable detectors to discover novel objects in an incremental learning fashion.

RESEARCH EXPERIENCES

NCTU – Vision and Learning Lab

Sep. 2022 - PRESENT

Research Assistant.

Advisor: Yen-Yu Lin, Distinguished Professor at NCTU

Co-advisor: Chien-Yao Wang, Research Fellow at Academia Sinica

*Research Project: **Open World Object Detection***

- Developed OWOD frameworks that can discover unknown objects without unknown supervision and successfully differentiate known and unknown class objects.
- Incorporated end-to-end Transformer architecture and Out-of-Distribution detection techniques to incrementally discover novel objects.

NCTU – Individual Study

Sep. 2021 - Jun. 2022

Research student

*Research Project: **Near Real-Time Badminton Pose Analysis System***

- Integrated camera system, MQTT service, image analysis, and body pose evaluation algorithms
- Developed pose analysis algorithm by applying OpenCV and Google MediaPipe.

AWARDS & HONORS

- Academic Achievement Award, NCTU, Taiwan *2021*
- Outstanding Student Exchange Scholarship, NCTU, Taiwan *2019*

Courses

- Pattern Recognition (Graduate Level), Artificial Intelligence (Graduate Level) *2023*
- Image Processing (Graduate Level), Machine Learning, Natural Language Processing *2022*
- Computer Vision for UAV Autopilot, Numerical Methods, Artificial Intelligence Capstone *2022*