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 and unknown class 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**

* Outstanding Exchange Student Scholarship, NCTU, Taiwan *2023*
* Academic Achievement Award, NCTU, Taiwan *2021*

**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*