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*