Kuan-Sheng 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 within computer vision and deep learning. I am now working on bridging the performance gap between Open Vocabulary Detection (OVD) and Open World Object Detection (OWOD). My goal is to design a detector that can discover unlabeled unknown objects during training and incrementally learn more unknown classes without supervision.

**RESEARCH EXPERIENCES**

**NCTU – Vision and Learning Lab** *Sep. 2022 - PRESENT*

*Research Assistant.*

Advisor: Yen-Yu Lin, 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 unlabeled unknown objects without unknown supervision and, in the meantime, preserves the performance of known classes.
* Incorporated SAM and end-to-end Transformer architecture to make OWOD models competitive with OVD models.

**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*