# **Yuchen Wang**

wang617@iu.edu | (812)349-8958

### **EDUCATION**

## Indiana University, Bloomington, Indiana, USA

Ph.D. in Intelligent Systems Engineering with minor in Statistical Science 08/2017-present M.S. in Computer Science 08/2015-05/2017

Tongji University, Shanghai, China

B.S. in Software Engineering 09/2007-06/2011

# **PUBLICATIONS**

- Yuchen Wang\*, Chuhua Wang\*, Mingze Xu, David Crandall. Stepwise Goal-Driven Networks for Trajectory Prediction. IEEE Robotics and Automation Letters (RA-L), 2022 with ICRA 2022 (win 3rd place on nuScences prediction task at 6th AI Driving Olympics, ICRA 2021).
- Yuchen Wang, Mingze Xu, John Paden, Lora Koenig, Geoffrey Fox and David Crandall. Deep Tiered Image Segmentation for Detecting Internal Ice Layers in Radar Imagery. IEEE International Conference on Multimedia and Expo (ICME), 2021 (Oral).
- Ego4D: Around the World in 3,000 Hours of Egocentric Video. Collaborate with Facebook AI Research. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022 (Oral).
- Yu Yao, Xizi Wang, Mingze Xu, Zelin Pu, **Yuchen Wang**, Ella Atkins, and David Crandall. DoTA: Unsupervised Detection of Traffic Anomaly in Driving Videos. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2022.
- Yu Yao, Mingze Xu, Yuchen Wang, David J Crandall, Ella M Atkins, "Unsupervised Traffic Accident Detection in First-Person Videos" International Conference on Intelligent Robots and Systems (IROS), 2019.
- Mingze Xu, Chenyou Fan, Yuchen Wang, Michael Ryoo, and David Crandall. Joint person segmentation and identification in synchronized first- and third-person videos. In European Conference on Computer Vision (ECCV), 2018.

#### **PROFESSIONAL ACTIVITIES**

#### **Conference Reviewer**

- Workshop on Applications of Computer Vision (WACV) 2021, 2022, 2023, 2024
- IEEE International Conference on Robotics and Automation (ICRA) 2022
- The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) 2023

### **WORKING EXPERIENCE**

# **Meta Instagram Reels**

06/2022-09/2022

• Machine Learning Engineer Intern

Use user personalized information to improve Sourcing and Ranking model for Instagram Reels Creation trends tab. The new model outperforms the existing one in normalized entropy by 10%.

# **Baidu USA Apollo** 08/2021-12/2021

• Self-Driving Researcher Intern

To solve more general case in self-driving lane change situations, analyze exemplar failure cases and lane change datasets including NGSIM, HighD, Waymo and In-house datasets. Design planning and prediction models for lane change specification which outperforms former rule-based model.

#### **AWARDS**

Indiana University CS Grad Fellowship