

Xiaoming Liu

- Received Ph.D. at Carnegie Mellon University in 2004.
- 7+ years in GE Research labs as scientist/project manager.
- Joined MSU in 2012, and currently a MSU Foundation Professor and Anil K. and Nandita Jain Endowed Professor.
- Graduated 9 Ph.D., working with 8 Ph.D. students, 1 post-doc, and several undergraduate students.
- Part of MSU CANVAS and MSU Mobility faculty cohort.
- Collaborated with GM, Ford, NEC, Bosch, etc.

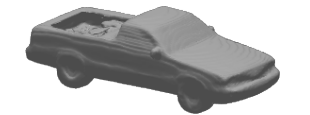
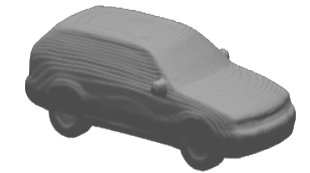
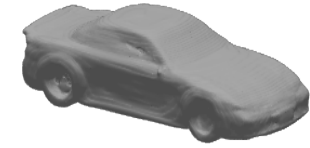
- Area: Computer vision, machine learning, deep learning
- Topics: Autonomous driving, Face

3D Perception for AD

- 2D/3D object detection
- Depth estimation
- Camera/LiDAR fusion
- Camera/Radar fusion
- 3D reconstruction

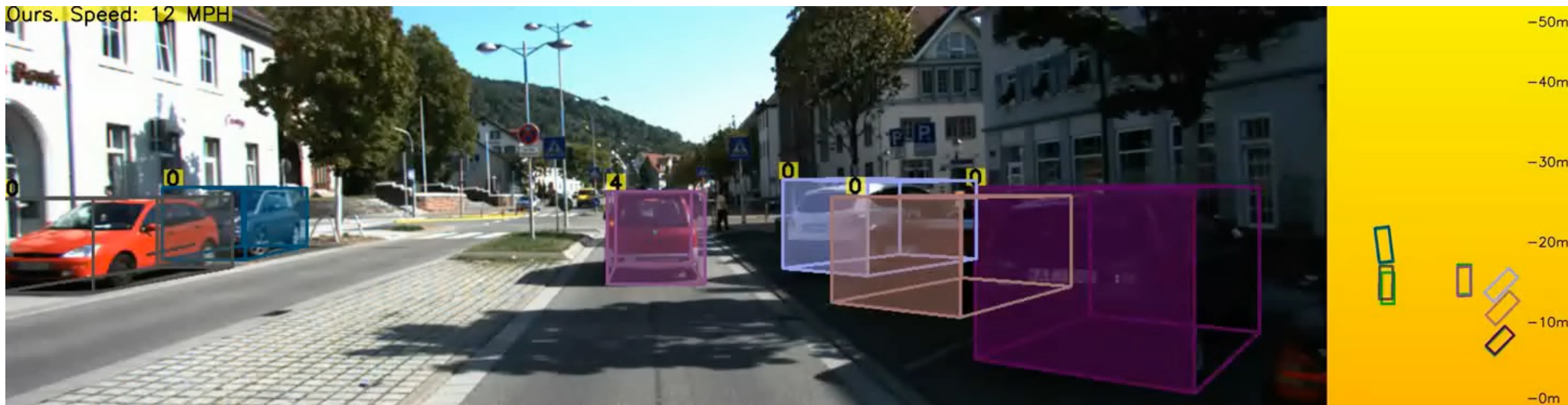


Input



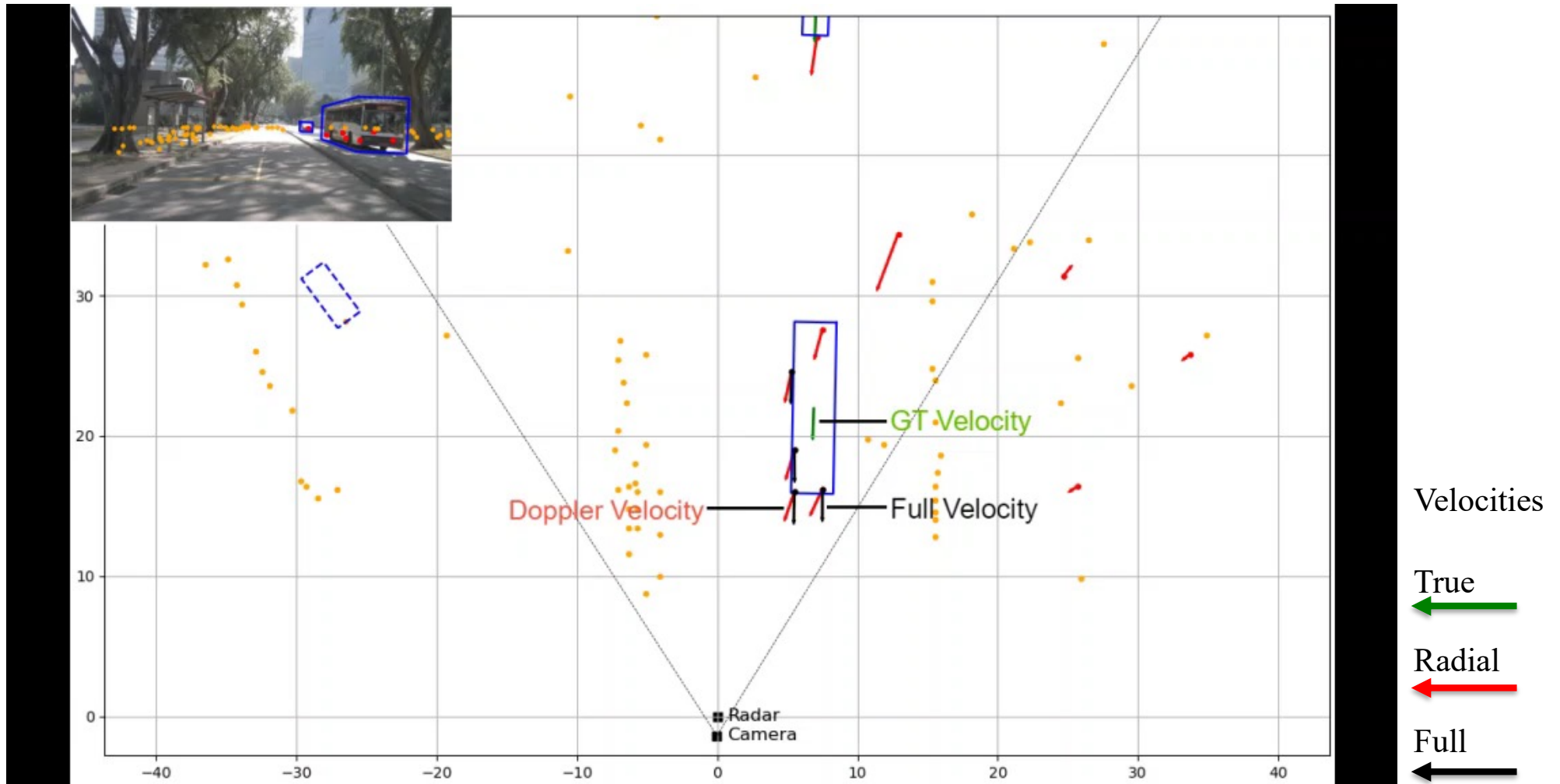
Output

3D Detection and Tracking



Garrick Brazil, Gerard Pons-moll, Xiaoming Liu, Bernt Schiele, "Kinematic 3D Object Detection in Monocular Video," in ECCV 2020

Full Velocity Estimation via Camera+Radar



Joint work with Prof. Daniel Morris

Yunfei Long, Daniel Morris, Xiaoming Liu, Marcos Paul Gerardo Castro, Punarjay Chakravarty, Praveen Narayanan, "Full Velocity Radar Returns by Radar-Camera Fusion," in ICCV 2021.