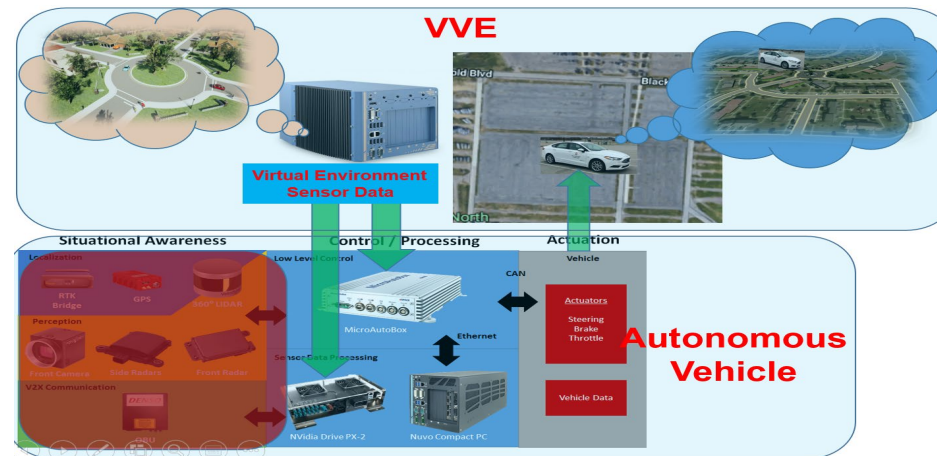# Vehicle-in-Virtual-Environment (VVE) Method for Developing and Evaluating VRU Safety of Connected and Autonomous Driving

Lead Researcher/Faculty: Levent Guvenc

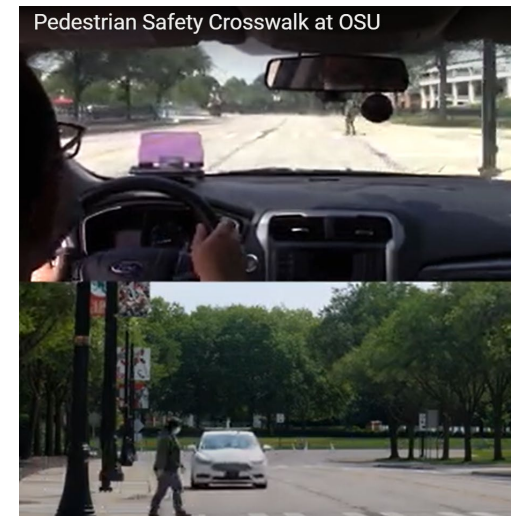**Project Team: Bilin Aksun-Guvenc, Haochong Chen**

Vehicle-in-Virtual-Environment (VVE) Method for Developing and Evaluating VRU Safety of Connected and Autonomous Driving – Brief Overview of Project

- Goals: Improve safety of vulnerable road user (VRU) sharing the road with connected and automated vehicles using vehicle-to-VRU communication using the VVE development and evaluation method.
    - Focus on pedestrian safety (year 1)
    - Focus on bicyclist safety (year 2)

Pedestrian Safety Crosswalk at OSU

Vehicle-in-Virtual-Environment (VVE) Method for Developing and Evaluating VRU Safety of Connected and Autonomous Driving– Expected Outcomes

- Expected outcomes
  - Development of the VVE method for evaluating connected and autonomous driving functions with particular focus on VRU safety
  - Improved Vehicle-to-VRU communication based VRU safety system
  - Integration of project results into OSU courses