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MSU’s advanced mobility ecosystem on display at 2019 NAIAS, Jan. 14-17

Michigan State University will highlight how it is transforming its 5,200-acre campus into a connected ecosystem for new mobility solutions during AutoMobili-D at the 2019 North American International Auto Show (NAIAS) at Detroit’s Cobo Center, Jan. 14-17.

This year’s MSU exhibit will offer experts and video introductions to MSU Mobility, featuring:

- multi-modal sensor fusion using radars, lidars, cameras and advanced algorithms to create “super-human” artificial intelligence for automated driving
- smart highway infrastructures
- SocioMobility – the impacts of automated vehicles and mobility on society
- legal challenges facing autonomous transportation

Autonomous research vehicles from MSU and the University of Michigan will be featured in a shared display of current mobility developments. It is the second year in a row that the state’s two largest universities will share a space at NAIAS, courtesy of PlanetM.

MSU experts in wireless communications and electromagnetics will be available to explain lidar technology and high-frequency radar for machine vision that captures a precise 3D view of the travel environment – even in fog or snow.

Experts will be on hand during AutoMobili-D to discuss MSU’s connected campus and leading technology, such as:

- Vehicle-to-vehicle and vehicle-to-infrastructure communication and data fusion
- Embedded pavement sensors for navigation assistance and damage detection
- Biometrics for passenger identification, personalization, and theft protection
- Cybersecurity and data updates

At MSU, smart systems work 24/7, sending and receiving ongoing data on how thousands of people move around different environments. MSU’s campus features:
- 5,200 acres (8.1 square miles) of urban, suburban, industrial and rural zones
- Nearly 60 lane-miles of roads
- More than 120 miles of pedestrian walkways and sidewalks
- Nearly 20 miles of bike lanes
- Nearly 40 traffic signals, with a planned system for real-time traffic control
- Diverse population with 70,000 students and faculty, and more than 100,000 people on game days
- 545 occupied buildings
- 26,000 parking spaces
- 30,000 vehicles on campus daily
- 85-member police force, providing flexibility in traffic management

Spartan Mobility Village is the new home of MSU's mobility labs where roadways and parking lots can be closed for testing of new technologies. In the future, unoccupied buildings will be used as a background for sensing technologies, including radar clutter simulating the suburban environment.

Related Website: Communications contact: Patricia Mroczek

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