

**MATC Consortium  
Members**University of  
Nebraska-LincolnUniversity of  
Nebraska-OmahaUniversity of Nebraska  
Medical CenterMissouri University of  
Science & Technology

University of Iowa

University of Kansas

University of Kansas  
Medical Center

Lincoln University

Nebraska Indian  
Community College**Mid-America  
Transportation Center**

Phone: 402-472-1932

Website: [matc.unl.edu](http://matc.unl.edu)2200 Vine Street  
262 Prem S. Paul Research  
Center at Whittier School  
P.O. Box 830851  
Lincoln, NE 68583-0851

# lidar Use in Smart Transportation: Vehicles & Infrastructure

## Presentation Topic

The adoption of Autonomous Vehicles in society hinges on the ability to have confidence in the Autonomous systems on the vehicle. This requires a significant investment in test systems. However, testing Autonomous Systems is extremely challenging and novel because these systems are developed on Machine-Learning based algorithms and operate in a near-infinite state-space. Jason Marks from National Instruments will identify some strategies that automakers and suppliers employ to tackle this problem, from simulation-heavy tests to deployable hardware test solutions. He will cover the intricacies of simulation and areas of investment that have not been adequately addressed today.

## About the Speaker



**Mr. Jason Marks** is an Autonomy Business Development Manager from National Instruments, who's worked in Autonomous Vehicle Software development and LiDAR hardware development for the last four years. Jason has architected test strategies for automotive car makers (OEMs), Tier 1 suppliers, and semiconductor organizations, and specializes in testing "black box" machine-learning based systems. Jason holds a patent in LiDAR test and has developed novel approaches to hardware-in-the-Loop testing of automotive image classification hardware.

## Join us via livestream:

**July 1, 2020****11 AM CDT (9 AM PDT)****Connect at:**

<https://unl.zoom.us/meeting/register/tJYkfuygqzljHNaVe5h-vll18aiVH1I2Ukh3n>

After registering, you will receive a confirmation email containing information about joining the meeting.



**MATC Consortium  
Members**University of  
Nebraska-LincolnUniversity of  
Nebraska-OmahaUniversity of Nebraska  
Medical CenterMissouri University of  
Science & Technology

University of Iowa

University of Kansas

University of Kansas  
Medical Center

Lincoln University

Nebraska Indian  
Community College**Mid-America  
Transportation Center**

Phone: 402-472-1932

Website: [matc.unl.edu](http://matc.unl.edu)2200 Vine Street  
262 Prem S. Paul Research  
Center at Whittier School  
P.O. Box 830851  
Lincoln, NE 68583-0851

# lidar Use in Smart Transportation: Vehicles & Infrastructure

## Presentation Topic

A smart city uses information and communications technologies to enhance its livability, workability and sustainability. The starting point is collecting data through sensors and systems in order to measure and monitor conditions throughout the city. That collected data can then be analyzed and turned into intelligence that can assist people and machines to take actions and make more informed decisions. In order to build these smart city applications, lidar is quickly emerging in this space as a useful sensor for identifying and tracking pedestrians and vehicles so as to improve analytics and safety while also providing information for V2X communication. Lidar has become a real driver, enabling municipal governments and businesses to create more livable, responsive environments for their citizens and customers.

## About the Speaker



**Mr. Jon Barad**, VP of Business Development at Velodyne Lidar, is currently leading Velodyne Lidar's efforts in engaging and developing strong partnerships with companies in emerging autonomous markets, including robotics, drones, trucking, smart cities, security, and more.

## Join us via livestream:

**July 1, 2020****11 AM CDT (9 AM PDT)**

### Connect at:

<https://unl.zoom.us/meeting/register/tJYkfuygqzljHNaVe5h-vll18aiVH1I2Ukh3n>

After registering, you will receive a confirmation email containing information about joining the meeting.

