

**CENTER FOR AUTOMOTIVE RESEARCH**

# **Center for Automated Vehicles Research with Multimodal AssurEd Navigation (CARMEN) Annual Symposium**

*A US Department of Transportation University Transportation Center (UTC)*

Monday and Tuesday, November 14-15, 2022

Symposium venue: The Blackwell, 2110 Tuttle Park Place, Columbus, OH 43210 – 614.247.4000

## **Monday, November 14**

9:30 – 10:10 a.m.

*Registration check-in and continental breakfast  
Lobby of Pfahl Hall Room 140*

10:10 a.m. – 12:00 p.m.

- 10:10 – 10:20 a.m.

- 10:20 – 10:30 a.m.

- 10:30 – 11:00 a.m.

- 11:00 – 11:30 a.m.

- 11:30 a.m. – 12:00 p.m.

### **Opening Remarks**

Dorota Grejner-Brzezinska, PhD – Vice President, Office of Knowledge Enterprise, The Ohio State University

Balasubramaniam Shanker, PhD – Chair, Department of Electrical and Computer Engineering, The Ohio State University

Zak Kassas, PhD – Director, CARMEN UTC

Robert Heilman – Director, Highly Automated Systems Safety (HASS) Center of Excellence (COE), US Department of Transportation

Karen Van Dyke – Director, Positioning, Navigation, and Timing (PNT) & Spectrum Management, US Department of Transportation  
*Pfahl Hall, Room 140*

12:00 – 1:30 p.m.

*Lunch  
The Blackwell Ballroom*

1:30 – 2:30 p.m.

**Breakout Session #1: Cyber-resilient PNT Sensors**  
*Pfahl Hall, Room 140*

2:30 – 3:30 p.m.

**Breakout Session #2: Cyber-resilient Vehicular and Infrastructure PNT**  
*Pfahl Hall, Room 140*

3:30 – 4:30 p.m.

Poster presentations, networking, and light snack break  
*Lobby of Pfahl Hall Room 140*

4:45

*Depart from The Blackwell for campus tours  
The Blackwell Lobby*

5:00 p.m.

Tour of OSU's ElectroScience Laboratory

5:45 p.m.

*Depart for OSU Center for Automotive Research*

5:50 p.m.

Tour of OSU Center for Automotive Research

6:30 p.m.

*Bus returns to The Blackwell for short break*



7:15 p.m.

*Meet in the The Blackwell Lobby for transportation to dinner*

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## **Monday, November 14 cont'd**

7:30 – 9:30 p.m.

Seated dinner with host bar  
Hofbräuhaus, 800 Goodale Street, Columbus, OH, 43212  
Second floor, private dining area  
\*ask for OSU CARMEN at the host stand if applicable

9:30 p.m.

*Return, via transport, to The Blackwell*

## **Tuesday, November 15**

7:00-8:45 a.m.

*Breakfast in Bistro 2110  
\*voucher needed for breakfast, so please ask Colleen for one  
the day before or provide your name at hostess stand*

9:00 a.m.

Vans depart from The Blackwell Lobby for Transportation Research Center  
10820 State Route 247, East Liberty, Ohio

11:30 a.m.

*Lunch via Panera Catering  
TRC, Rhodes Center*

12:15 p.m.

*Vans depart for OSU Airport*

12:45 p.m.

OSU Knowlton Airport / Aerospace Research Center  
2160 West Case Road, Columbus, OH 43221

01:45 p.m.

*Vans depart for The Blackwell*

02:00 p.m.

*Vans arrive at The Blackwell*

### **Event contact:**

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The Ohio State University Center for Automotive Research  
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**THE OHIO STATE UNIVERSITY**  
CENTER FOR AUTOMOTIVE RESEARCH

**CAR.OSU.EDU**