The Ohio State University
Center for Automotive Research

Membership Consortium

Providing a unique opportunity for industry to engage in original, highly leveraged precompetitive research in automotive and mobility systems, with a focus on advanced propulsion; electrification; vehicle safety and security and connectivity and autonomy.

Consortium Membership

In addition to the networking and student engagement benefits available at all levels, Consortium Membership at the Platinum and Gold levels center around research.

The program provides a platform allowing industry, academic researchers and students to come together and pool their resources to focus on automotive innovations in a pre-competitive environment.

The program encourages young faculty to engage the automotive industry and serves as a seed grant to launch future collaborative work.

At the Gold level members can provide input on the project selection and at the Platinum level members have the opportunity to directly select a project or topic.

Students are at the center of the program. The vast majority of the membership fees directly support incoming graduate students that will be engaged in the membership research projects which in turn increases the production of graduates who meet the stringent requirements of today's automotive industry.

“The Ohio State consortium scales well for the investment. For a company willing to participate in pre-competitive, shared research within their industry, no other university program will offer more unit output per unit investment.”

Gary L. Parker
Director, Advanced Engineering
Electromobility Programs
Cummins, Inc.

Sample Projects

Design of a Computationally Efficient Algorithm for Vehicle Velocity and Energy Management Optimization in a Connected and Automated Mild-Hybrid EV

Model-Based Estimation and Control of Clutch-to-Clutch Gearshifts In Automatic Transmissions

Synthesis of Physics-Based, Estimation-Oriented Engine Air Path Models from Nonlinear PDE’s via Model Order Reduction: A Proof of Concept

Driver-In-The-Loop Simulator for Vehicle Dynamics Research

Reliability of Variable Flux Machines for Hybrid Electric Vehicles

Development of a Battery Life Estimation Framework for Automotive Applications Using Supervised Learning

Engineering High-Voltage Cathode - Solid Electrolyte Interfaces

Test Cases for Automated Vehicle Systems and Safety

N.W. 33 Road SMART Corridor Multi-Resolution Traffic Simulation

Dynamic Routing for Autonomous Vehicles for Transportation and Deliveries

Intelligent Vehicle Monitoring for Safety and Security (IVMSS)

Understanding and Improving Consumer Trust In Autonomous Vehicles

Development of Virtual Fuel Economy Trend Evaluation Process

Cooperative Collision Free Path Planning and Collision Avoidance for Autonomous Driving

Member Benefits	Silver $10,000	Gold $30,000	Platinum $50,000
Showcase/feature members in CAR marketing materials	X	X	X
Invitation to Bi-Annual Executive Advisory Board Meetings	X	X	X
Membership sponsored exploratory reporting meetings and access to results and presentations		X	X
Opportunity to present technical seminars at CAR	X	X	X
Opportunity to recruit CAR students through resume access, information sessions and meet and greet events	X	X	X
Corporate mentorship for graduate students		X	X
Input on project selection for exploratory research projects		X	X
Direct project selection for exploratory research projects			X
Consultant time with faculty and senior research staff	X	X	X
10% discount on testing services		$5,000 limit	$10,000 limit
Distance education benefits (Pre-recorded seminar library)		$5,000 limit	$10,000 limit

2018 Consortium Members

Platinum

Ford

FCA
FIAT CHRYSLER AUTOMOBILES

TRC Transportation Research Center Inc.

GROUPE RENAULT

HYUNDAI

HONDA

Gold

TOYOTA

BOSCH

TE connectivity

SCHAEFFLER

Cummins

WIND
AN INTEL COMPANY

MERCURY

GENERAL MOTORS

Delphi Technologies

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