Transportation and Technology Solutions

# SOUTHWEST RESEARCH INSTITUTE® Cybersecurity

cybersecurity.swri.org

## Cybersecurity

Southwest Research Institute® (SwRI®) applies proven cybersecurity best practices and standards to the challenge of improving the cyber resilience of global networks and cyber-physical systems. Through active research and development, SwRI is expanding the state of the art in:

- Future-proof security solutions
- Application security
- Network traffic monitoring
- Embedded systems security

SwRI has developed a uniquely tailored cybersecurity process for identifying and evaluating the complex security issues associated with emerging automotive technology. SwRI works with commercial and heavy-duty original equipment manufacturers (OEMs) and suppliers, performing security consulting, including whole vehicle and component security penetration testing.

- Electronic control unit (ECU) penetration assessments
- Connected and autonomous vehicle (CAV) sensor vulnerability assessments
- Secure firmware/software over-the-air (SOTA) updates

#### **Experience**

- Threat analysis and risk assessments
- Vehicle-to-vehicle (V2V)
- Connected and autonomous vehicles
- Electric vehicles
- Requirements analysis, design, prototyping, integration and testing
- Independent evaluations

#### Resources

- 2M+ square feet of labs and facilities
- Custom security assessment tools
- Advanced penetration testing labs

## We welcome your inquiries. For more information, please contact:

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### SOUTHWEST RESEARCH INSTITUTE

Southwest Research Institute® is a premier independent, nonprofit research and development organization. With eleven technical divisions, we offer multidisciplinary services leveraging advanced science and applied technologies. Since 1947, we have provided solutions for some of the world's most challenging scientific and engineering problems.

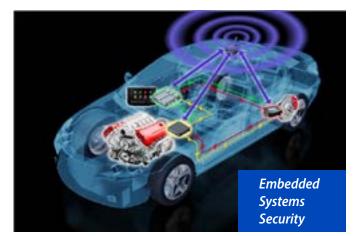
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Autonomous Vehicle (CAV) Vulnerability Assessments

**Problem Detected with Charging Station** 

Electric Vehicle Security **Evaluations**