SAE MID MICHIGAN
An SAE International Section

Select a meal of Beef or Chicken
Reservations required by May 10
Purchase Tickets online at:
http://www.midmichigansae.org

Mid-Michigan Section Program with Dinner
Monday, May 15, 2017
6:00pm Social Hour, 7:00pm Dinner, 8:00pm Program
Holiday Inn Flint
5353 Gateway Center, Flint Township, Michigan
Students $20; Retiree $30; Members $35; non-members, $40

Panel moderator **Mark N. Pope** _and_ **Mid-Mich SAE** _extends an invitation to attend our_

Panel Discussion "Cybersecurity and the Automobile"
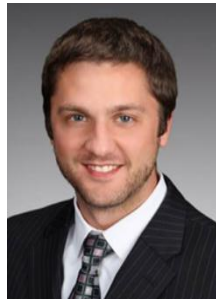
Dr. Richard Enbody   **Justin Montalbano**   **Dr. Andre' Weimerskirch**   **Mark Zachos**

Discussion Abstract

Scoring Vehicle Vulnerabilities

Cybersecurity is a paramount concern in vehicles since insufficient security puts lives at risk. It is critical to quantify risks and scoring vulnerabilities has proven to be a useful tool for traditional IT security to evaluate the criticality of vulnerabilities with respect to their risks. We present a methodology for adapting the proven CVSS scoring system to vehicles. This paper discusses the connected car environment and differences between vehicular security and traditional IT systems security. Following this discussion, we study publicly known vulnerabilities in vehicular security with the ultimate objective of quantifying them using the existing CVSS scale for IT systems. Equipped with the CVSS score, we are able to objectively comment on the impact of vehicular vulnerabilities and, ultimately, the need for architectural and add-on security upgrades for vehicles. We also propose a CVV naming system, based on CVE by MITRE, to assign unique identifiers to these vulnerabilities so that vehicular vulnerabilities can be efficiently tracked and studied. Finally, we draw inferences towards changing trends in vehicle security and address the question of whether vehicle hacking is mature enough to be an immediate threat for society.

Reservations required by Noon
Wednesday, May.10, 2017
Purchase Tickets online at:
http://www.midmichigansae.org
Contact: Bernard Santavy at
SAEMidMichSec@cs.com
or call (810)-635-7948 for reservations

Guest Panelists

Dr. Richard Enbody Richard is an Associate Professor at Michigan State University in the Department of Computer Science and Engineering. He joined the faculty in 1987 after earning his Ph.D. in Computer Science from the University of Minnesota. He has served as Acting Chair of the Department, Associate Chair, and as Director of the Computer Engineering Undergraduate Program. Richard received his B.A. in Mathematics from Carleton College in Northfield, Minnesota in 1976, and spent six years teaching high school mathematics in Vermont and New Hampshire.

Dr. Andre' Weimerskirch André Weimerskirch works in the area of applied data security. He studied business information technology as well as mathematics at Darmstadt Technical University before receiving his Master of Science in computer science at Worcester Polytechnic Institute, USA. André then received a Ph.D. of Ruhr-University of Bochum (HGI, eurobits) in the area of applied data security. André is co-founder of ESCRYPT which was acquired by Bosch in 2012.

Justin Montalbano Justin Montalbano has a background originating from the Information Security and ethical hacking realm. In his most recent role, Justin is responsible for building and operating an Automotive Cybersecurity Testing facility for Delphi automotive. Justin has focused most of his career in security by providing a red team mindset to IT processes, technologies, etc. Automotive engineering is a newer industry for Justin but he is excited for the challenges that lie ahead.

Mark Zachos Mark Zachos is president and founder of DG Technologies - a vehicle network solutions company with a quarter-century of offering diagnostics, re-programming, engineering tools, consulting and training in support of vehicle networks. www.dgtech.com. DG Technology chairs and participates on numerous SAE, ATA TMC and ISO committees, and Zachos served on _the_ board of directors of SAE International.

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