

MERT D. PESÉ

University of Michigan, Ann Arbor | Ph.D. Candidate

4944 Beyster Building, Ann Arbor, MI 48109

mpese@umich.edu | www.mpese.com

LinkedIn: www.linkedin.com/in/mertpese/

EMPLOYMENT

CISPA Helmholtz Center for Information Security <i>Visiting Researcher, Secure Cyber-Physical Systems Group</i>	Saarbrücken, Germany Jun. 2021–Aug. 2021
General Motors <i>Cybersecurity Research Intern, Electrical & Controls Systems Architecture Team</i>	Warren, MI Jun. 2020–Aug. 2020
Harman International <i>Cybersecurity Intern, Automotive Product Security</i>	Novi, MI May 2019–Aug. 2019
General Motors <i>Cybersecurity Research Intern, Electrical & Controls Systems Architecture Team</i>	Warren, MI Jun. 2018–Aug. 2018
Audi <i>Researcher, Audi Electronics Venture</i>	Ingolstadt, Germany Apr. 2016–Oct. 2016
Audi <i>Cybersecurity Intern, Audi Electronics Venture</i>	Ingolstadt, Germany Jan. 2016–Mar. 2016
University of Michigan Transportation Research Institute <i>Automotive Security Intern, Automotive Cybersecurity & Privacy Group</i>	Ann Arbor, MI Sep. 2015–Dec. 2015
Bertrandt <i>Automotive Ethernet Intern, In-Vehicle Networks and Gateway Team</i>	Ingolstadt, Germany Mar. 2015–Aug. 2015
BFFT <i>Embedded Software Design Intern, Vehicle Interface Development Team</i>	Ingolstadt, Germany Aug. 2013–Oct. 2013
Panasonic <i>Electrical Engineering Intern, Relays Testing Laboratory</i>	Pfaffenhofen, Germany Aug. 2012–Sep. 2012

EDUCATION

University of Michigan, Ann Arbor Ph.D in Computer Science & Engineering advised by Prof. Kang Shin	Ann Arbor, MI Jan. 2017–Apr. 2022 (expected)
Technische Universität München M.S. in Electrical Engineering and Information Technology (<i>Highest Distinctions</i>)	Munich, Germany Dec. 2016
Technische Universität München B.S. in Computer Science	Munich, Germany Jul. 2015
Technische Universität München B.S. in Electrical Engineering and Information Technology (<i>Highest Distinctions</i>)	Munich, Germany Jul. 2014

INTERESTS & SKILLS

Interests: Vehicle Cybersecurity, Intrusion Detection Systems, Privacy, Automotive Ethernet, Threat Modeling
Advanced Knowledge: CAN, CANoe, AUTOSAR, Reverse Engineering, SOTA Updates, Android Automotive

Programming Language: C/C++, Python, MATLAB, Java, x86, CAPL, VHDL

Languages: German (native), Turkish (native), English (fluent), French (proficient), Spanish (basic)

PATENTS & PUBLICATIONS (Selection)

1. **Mert D. Pesé**, Jay W. Schauer, Junhui Li and Kang G. Shin. "S2-CAN: Sufficiently Secure Controller Area Network," *Annual Computer Security Applications Conference 2021 (ACSAC'21)*, Dec. 2021.
2. **Mert D. Pesé**, Evripidis Paraskevas, Fan Bai, Massimo Osella, Soheil Samii. "Systems and methods for preserving the privacy of collected vehicular data," *US Patent US 11,126,744 B2*.
3. **Mert D. Pesé**, Xiaoying Pu, and Kang G. Shin. "SPy: Car Steering Reveals Your Trip Route!," *Proceedings on Privacy Enhancing Technologies 2020 (PETS'20)*, July 2020.
4. **Mert D. Pesé**, Kang G. Shin, Josiah Bruner, and Amy Chu, "Security Analysis of Android Automotive," *SAE Technical Paper 2020-01-1295 (WCX'20)*, Apr. 2020.
5. **Mert D. Pesé**, Troy Stacer, C. Andrés Campos, Eric Newberry, Dongyao Chen, and Kang G. Shin. "LibreCAN: Automated CAN Message Translator," *2019 ACM SIGSAC Conference on Computer and Communications Security (CCS '19)*, Nov. 2019.
6. **Mert D. Pesé** and Kang G. Shin, "Survey of Automotive Privacy Regulations and Privacy-Related Attacks," *SAE Technical Paper 2019-01-0479, 2019 (WCX'19)*, Mar. 2019.
7. Armin Wasicek, **Mert D. Pesé**, Andre Weimerskirch, Liza Burakova and Karan Singh, "Context-aware Intrusion Detection in Automotive Control Systems," *5th escar USA (escar'17)*, Jun. 2017.
8. **Mert D. Pesé**, Karsten Schmidt and Harald Zweck, "Hardware/Software Co-Design of an Automotive Embedded Firewall," *SAE Technical Paper 2017-01-1659 (WCX'17)*, Mar. 2017.

SERVICES

IEEE Transactions on Information Forensics & Security Reviewer	2021
AutoSec Workshop @ NDSS 2021 Technical Program Committee Member	2021
Automotive Security Research Group (ASRG) Member and Speaker	2019-Present
SAE World Congress Experience (WCX) Session Organizer / Technical Program Committee Member	2020-Present
Eta Kappa Nu - Beta Epsilon Chapter Member, Mentor and DEI Committee Member	2018-Present
SAE CyberAuto Challenge Industry Mentor for High School and Undergraduate Students	2019
SAE World Congress Experience (WCX) Reviewer	2019, 2020
ACM/IEEE Symposium on Edge Computing (SEC) Reviewer	2018
ACM/IEEE International Conference on Cyber-Physical Systems Sub-reviewer	2017, 2018
SAE Data Link Connector Vehicle Security Committee (TEVDS20) Member	2017
Conference on Cryptographic Hardware and Embedded Systems Sub-reviewer	2017