

Curriculum Vitae for Thomas G. Livernois Ph.D, PE, CFEI, CVFI

Education and Licensing

- Ph.D., Electrical Engineering, University of Michigan, Ann Arbor, 1991
- M.S., Electrical Engineering, Michigan State University, 1986
- B.S., Electrical Engineering, Michigan Technological University, 1984
- Registered Professional Engineer, Michigan, Arkansas, New York, Virginia

Specialized Professional Competencies

- Design and analysis of electrical and electronic systems, including automotive and commercial vehicle systems functionality in adverse environments. Specific vehicle system experience includes powertrain, chassis, and safety systems.
- Root cause analysis of thermal events in electric machinery, generators, distribution systems, appliances, and switch gear
- Electromagnetic compatibility analysis and mitigation
- Root cause analysis of structural electrical fires, origin and cause of vehicle fires
- Electrocutation, power distribution faults, and arc flash events

Professional Experience and Qualifications

- Product Engineer, Power Distribution / Electronic Systems, Ford Motor Company, 1991 to 1994
- Product Engineer/Senior Engineer, Electrical/Electronic Systems Compatibility, Chrysler Corporation, 1995-1998
- Supervisor, Powertrain and Chassis Electronics, DaimlerChrysler, 1998 to 2000
- Executive Director, AGC America Inc., 2000 to 2003
- Owner/President, Physics Solutions, LLC, 2003
- Principal Engineer, Electrical and Semiconductors Practice, Exponent, 2003 to 2010
- Principal Engineer, Design Research Engineering, 2010 to 2019
- Principal Engineer, Carr Engineering, 2019 to present

Professional Memberships

- Member, Institute of Electrical and Electronic Engineers (IEEE)
- Member, SAE International
- Chair, SAE Odometer and Speedometer Committee

Recent Professional Development

- Emissions-Related OBD Systems Design, SAE, 2021
- Introduction to Brake Control Systems ABS, TCS, and ESC, SAE, 2021
- Introduction to NFPA 70, 2020 National Electrical Code, NTT, 2019
- Overview and Impact of the ISO 26262 Standard, SAE, 2019
- Introduction to Radar for Automotive Applications, SAE, 2018
- Keys to Creating a Cybersecurity Process from the J3061 Process Framework, SAE, 2016
- Cybersecurity: Introduction to Embedded System Exploitation, SAE, 2016
- Reconstruction and Analysis of Rollover Crashes of Light Vehicles, SAE, 2016
- Reconstruction and Analysis of Motorcycle Crashes, SAE, 2016
- FMEA for Robust Design, SAE, 2016
- Driver Distraction from Electronic Devices, SAE, 2016
- Fundamentals of Automotive All-Wheel Drive Systems, SAE, 2016
- The Scientific Method for Fire and Explosion Investigations, IAAI, 2014