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EDUCATION

12/99 – 08/05 Virginia Polytechnic Institute and State University, Blacksburg, VA
Ph.D., INDUSTRIAL & SYSTEMS ENGINEERING
Human Factors Engineering Option

08/97 – 12/99 Virginia Polytechnic Institute and State University, Blacksburg, VA
M.S., INDUSTRIAL & SYSTEMS ENGINEERING
Human Factors Engineering Option

08/92 – 12/96 University of Puerto Rico - Mayaguez campus, Mayaguez, PR
B.S., INDUSTRIAL ENGINEERING

TEACHING EXPERIENCE

08/18 – Present Biomedical Engineering and Mechanics Department, Virginia Tech, Blacksburg, VA
ASSOCIATE PROFESSOR
Courses taught:

- ESM/AOE 2074 – Computational Methods
- BMES 5074 – Biomedical Research Design (new course)
- ESM 4614 – Probability-based Modeling, Analysis, and Design

Program Coordinator, Human Factors in Transportation Safety Graduate Certificate, since January 2021

Tenured in June 2023

02/12 – Present Grado Department of Industrial and Systems Engineering, Virginia Tech, Blacksburg, VA
AFFILIATE FACULTY MEMBER
Courses taught:

- ISE 5615 – Human Factors Research Design I
- ISE 5154 – Applied Human Factors Engineering

08/06 – 01/07 Grado Department of Industrial and Systems Engineering, Virginia Tech, Blacksburg, VA
ADJUNCT FACULTY MEMBER
ISE 5154 – Applied Human Factors Engineering

01/01 – 08/01	Grado Department of Industrial and Systems Engineering, Virginia Tech, Blacksburg, VA **INSTRUCTOR** ISE 3614 – Introduction to Human Factors Engineering
05/00 – 07/00	Grado Department of Industrial and Systems Engineering, Virginia Tech, Blacksburg, VA **INSTRUCTOR** ISE 2404 – Deterministic Operations Research
08/97 – 12/99 & 05/02 – 08/02	Virginia Polytechnic Institute and State University, Blacksburg, VA **GRADUATE TEACHING ASSISTANT** Responsible for all homework grading for Industrial Engineering's undergraduate and graduate courses. Clarified students' questions concerning engineering design problems or lecture material. Full responsibility for lectures (on different topics) in which the course instructor could not attend.

RESEARCH EXPERIENCE

01/10 – Present	Virginia Tech Transportation Institute, Blacksburg, VA **RESEARCH SCIENTIST**
12/20 – 05/24	Virginia Tech Transportation Institute, Blacksburg, VA **PROGRAM LEAD – DATA ENGINEERING** Division of Data and Analytics
04/13 – 12/20	Virginia Tech Transportation Institute, Blacksburg, VA **CENTER DIRECTOR** Center for Data Reduction and Analysis Support
06/11 – 04/13	Virginia Tech Transportation Institute, Blacksburg, VA **GROUP LEADER** Data Analysis Support Group
08/02 – 12/09	Virginia Tech Transportation Institute, Blacksburg, VA **SENIOR RESEARCH ASSOCIATE** Oversee management and dissemination of various large-scale naturalistic driving databases. Collaborate with other researchers interested in using these databases. Developed experiments on a variety of transportation related areas, including Teen Driving, Driver Distraction, Automated Driving Systems (ADS), Advanced Driver Assistance Systens (ADAS), Advanced Collision Avoidance Technologies (ACAT), Intersection Decision Support (IDS), Cooperative Intersection Collision Avoidance Systems (CICAS), the Intelligent Vehicle Initiative (IVI), and several proprietary technologies and programmatic efforts. Managed experimenters and other personnel and resources needed to conduct these experiments. Analyzed and supervised analysis of data resulting from these efforts. Developed technical reports and journal publications based on these analyses.

01/02 – 08/05

Virginia Tech, Blacksburg, VA
DISSERTATION RESEARCH
The dissertation project resulted in the creation of artificial neural network models that predicted human posture and kinematics during lifting exertions. These models performed resulted in smaller prediction errors than other previous approaches, some of them commercially available. Responsible for the processing of the motion dataset, the construction, training, and development of the networks, and the analysis of the resulting data.

06/01 – 05/02

Virginia Tech Transportation Institute, Blacksburg, VA
RESEARCH ASSISTANT
Conducted data analysis that led to a report outlining the sleep patterns and resultant driving behavior of Commercial Vehicle Operations (CVO) drivers involved in long hauls. The report will be used in the generation of fatigue avoidance guidelines for the trucking industry. Also participated in other projects that studied the patterns of distractions experienced by CVO drivers in naturalistic conditions and the performance of a laser-based lateral guidance system in preventing unintended lane departures.

08/98 – 12/99

Virginia Tech, Blacksburg, VA
THESIS RESEARCH
Responsible for research efforts to increment scientific knowledge of the lumbar spine. The thesis contains: (1) a comprehensive database on lumbar muscle recruitment patterns in static postures sustained under high-magnitude exertions and (2) the empirical evaluation of several prediction efforts of lumbar muscle recruitment patterns available in the literature. Responsible for the design and construction of the experimental apparatus, the selection and installation of data collection equipment, participant recruitment, conduction of the experiment, and analysis of the resulting data.

03/94 – 07/95

University of Puerto Rico – Mayaguez campus: Solar Car Project, Mayaguez, PR
TEAM CAPTAIN
Managed a group of eight people during the design and manufacturing stages of the project. Directed all project related activities including work programming, design supervision and approval, fund raising, and deadline placement. Delegated responsibilities on fellow team members. The team exceeded expectations during my leadership, improving its position by more than 50 percent, compared with previous races.

SPONSORED PROJECTS

Over a 20+ year career, I have been associated with over $70M in sponsored research projects, my personal share based on percentage responsibility exceeds $20M. Primary sponsors include the US Department of Transportation (primarily through the National Highway Traffic Safety Administration and the Federal Highway Administration) and private Major Automotive Companies and Major Electronics Companies. Sponsors also include the National Academies (NAS), the National Science Foundation (NSF) and the National Institutes of Health (NIH).

01/24 – 01/25
Proprietary Sponsor
PRINCIPAL INVESTIGATOR
Developing and evaluating driver impairment detection approaches using naturalistic driving data ground-truth
(Proposal # P2YJILZA, Contract Value: $98,744)

05/24 – 08/24
University of Louisville
PRINCIPAL INVESTIGATOR
SHRP 2 Data Extraction
(Proposal # PZ7E5AH5, Contract Value: $10,595)

04/24 – 03/24
Bridgestone Americas Tire Operations, LLC
CO-PRINCIPAL INVESTIGATOR
Large-Scale Accelerations Histograms
(Proposal # P4PHW5JF, Contract Value: $43,660)

09/23 – 03/24
University of Connecticut
PRINCIPAL INVESTIGATOR
SHRP 2 Data Support for the University of Connecticut
(Proposal # PTWTR3NX, Contract Value: $20,999)

09/23 – 08/24
Federal Highway Administration
PRINCIPAL INVESTIGATOR
Eisenhower Fellowship - Werner
(Proposal # P6FM4CFJ, Contract Value: $5,000)

09/23 – 08/24
Federal Highway Administration
PRINCIPAL INVESTIGATOR
Eisenhower Fellowship - Britten
(Proposal # PX4LTYH2, Contract Value: $5,000)

09/23 – 11/23
Nuro
PRINCIPAL INVESTIGATOR
SHRP2 NDS Data Support – Event Reconstruction #3
(Proposal # PSOVX3L7, Contract Value: $46,206)

01/23 – 06/25
Various Sponsors
PRINCIPAL INVESTIGATOR
InternHub
(Fund # 500205, Contract Value: $100,000)

01/23 – 03/23	University of Central Florida **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for University of Central Florida (Proposal # PNEM3C3R, Contract Value: $9,936)
01/23 – 04/23	Nuro **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support Event Reconstruction #2 (Proposal # PO37QRNS, Contract Value: $16,974)
12/22 – 08/23	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Eisenhower Fellowship - Valente (Proposal # PU6HM635, Contract Value: $5,000)
11/22 – 01/23	Zoox, Inc. **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Zoox, Inc. (Proposal # PTRK6VRN, Contract Value: $8,222)
10/22 – 04/23	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Birch (Proposal # PE6H5YJV, Contract Value: $13,795)
09/22 – 09/24	National Highway Traffic Safety Administration **CO-PRINCIPAL INVESTIGATOR** Field Data Collection with Consumer Available Driver Support Systems (Proposal # PFEF7JPK, Contract Value: $3,000,000)
09/22 – 09/24	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Providing Technical Support for SHRP2 Naturalistic Driving Study (NDS) data - Maintaining Secure Remote Data Access for Safety Training and Analysis Center (STAC) (Proposal # PJCNDYRH, Contract Value: $128,115)
08/22 – 05/23	Virginia Transportation Research Council **PRINCIPAL INVESTIGATOR** Temporary Disability (Proposal # PQHXWNM3, Contract Value: $31,500)
08/22 – 12/22	Nuro **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support Event Reconstruction (Proposal # PWV24KBC, Contract Value: $5,769)
07/22 – 08/22	Mission Scientific Consulting **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Mission Scientific (Proposal # PCJEE3YW, Contract Value: $1,806)

07/22 – 12/22	Crash Avoidance Metrics Partnership **PRINCIPAL INVESTIGATOR** Traffic Optimization for Signalized Corridors Data Curation (Proposal # PXMTRCSW, Contract Value: $14,659)
07/22 – 08/22	Technische Universitat Dresden **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for TU-Dresden (Proposal # P5LFOL3M, Contract Value: $10,036)
07/22 – 12/22	Insurance Institute for Highway Safety **PRINCIPAL INVESTIGATOR** IIHS Baselines (Proposal # PFSWXJYZ, Contract Value: $16,959)
05/22 – 06/23	Global Center for Automotive Performance Simulation **PRINCIPAL INVESTIGATOR** Rest Stops (Proposal # PKBBHOVO, Contract Value: $24,753)
05/22 – 10/23	Oak Ridge National Laboratory **PRINCIPAL INVESTIGATOR** SHRP 2 Video Validation (Proposal # PBGSTKSN, Contract Value: $23,264)
04/22 – 01/24	Major Automotive Company **CO-PRINCIPAL INVESTIGATOR** Driver Status Risk Assessment using Naturalistic Driving Study Data (Proposal # PT7TJR73, Contract Value: $420,000)
04/22 – 03/23	Commonwealth Cyber Initiative **PRINCIPAL INVESTIGATOR** Automated Functional Scenario Creation (Proposal # PBBBFXCZ, Contract Value: $30,000)
02/22 – 09/22	Battelle Memorial Institute **CO-PRINCIPAL INVESTIGATOR** Battelle Pooled Fund Study Pedestrians Part B; Short Title: Battelle Pedestrians Part B (Proposal # P7XH2OG6, Contract Value: $1,850)
02/22 – 03/22	Proprietary Sponsor **CO-PRINCIPAL INVESTIGATOR** Driver Lack of Communication - Hypothesis Validation (Proposal # PTZTNHXZ, Contract Value: $19,415)
01/22 – 09/22	Battelle Memorial Institute **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Performance Based Design Review of Horizontal Curves (Proposal # PYW6ZR66, Contract Value: $16,826)

01/22 – 02/23	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Personal Mobility Device Maneuvering (Proposal # PRK3QWDF, Contract Value: $337,240)
01/22 – 04/22	University of Washington **CO-PRINCIPAL INVESTIGATOR** University of Washington Pooled Fund Study - Pedestrians - Part B (Proposal # PLG5SUJD, Contract Value: $9,670)
01/22 – 03/22	University of Utah **CO-PRINCIPAL INVESTIGATOR** UofU Microscopic Simulation Part B (Proposal # PXWY4JPG, Contract Value: $10,630)
12/21 – 12/23	Major Automotive Company **PRINCIPAL INVESTIGATOR** Reaction Time Quantification (Proposal # PVORRRX5, Contract Value: $194,563)
12/21 – 08/22	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Eisenhower Fellowship - Britten (Proposal # PVCQGDX3, Contract Value: $5,000)
12/21 – 08/22	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Eisenhower Fellowship - Valente (Proposal # P2KSAKHK, Contract Value: $5,000)
10/21 – 02/22	Michigan State University **CO-PRINCIPAL INVESTIGATOR** MSU Signalized Intersection Traversals (Proposal # P64T2IJJ, Contract Value: $14,110)
09/21 – 03/24	Dunlap and Associates **CO-PRINCIPAL INVESTIGATOR** Cell Phone Blocking Technology to Reduce Distracted Driving (Contract Value: $250,332)
09/21 – 03/23	National Highway Traffic Safety Administration **CO-PRINCIPAL INVESTIGATOR** Introductory Research into Artificial Intelligence Uses in ADAS and ADS Technologies (Proposal #PWGLXGVV, Contract Value: $497,052)
07/21 – 08/21	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** JAMA Guidelines Compliance Verification (Proposal #P5V267T5, Contract Value: $40,000)

07/21 – 12/23 National Surface Transportation Safety Center of Excellence
PRINCIPAL INVESTIGATOR
STSCE Ambulance Interactions
(Proposal # PWGP6AVJ, Contract Value: $108,373)

07/21 – 05/23 National Surface Transportation Safety Center of Excellence
PRINCIPAL INVESTIGATOR
STSCE COVID-19 Driving
(Proposal # PWGP6AVJ, Contract Value: $40,000)

05/21 – 04/22 Proprietary Sponsor
PRINCIPAL INVESTIGATOR
Operations Safety Envelope for Test Driver Evaluation Pilot
(Proposal # PEIKWIK3, Contract Value: $278,192)

06/21 – 07/21 Exponent
CO-PRINCIPAL INVESTIGATOR
Exponent Vehicle Network Data
(Proposal # PRULDFEK, Contract Value: $1,056)

04/21 – 04/21 Proprietary Sponsor
PRINCIPAL INVESTIGATOR
Independent Review for ____ ____ and ____
(Proposal # PJQ5DLI2, Contract Value: $21,594)

03/21 – 05/21 Texas Transportation Institute
CO-PRINCIPAL INVESTIGATOR
TTI Near-crash Roadway Links
(Proposal # PQHQZ7AC, Contract Value: $854)

02/21 – 05/21 University of Buffalo
CO-PRINCIPAL INVESTIGATOR
SHRP 2 Data Support for UBuffalo/FHWA - HVCs Enclave Support
(Proposal # PHQO7KLN, Contract Value: $26,886)

02/21 – 09/21 The Regents of the University of Michigan
CO-PRINCIPAL INVESTIGATOR
SHRP 2 Video Processing with FARO
(Proposal # PZ5G44VI, Contract Value: $9,958)

01/21 – 03/21 University of Connecticut/University of Central Florida
CO-PRINCIPAL INVESTIGATOR
University of Central Florida Crash Roadway Attributes
(Proposal # PFWZZQRR, Contract Value: $9,144)

01/21 – 12/22 Proprietary Sponsors
CO-PRINCIPAL INVESTIGATOR
Automated Mobility Partnership: 3rd Phase
(Contract Value: $2,750,000)

12/20 – 02/21	University of Washington **CO-PRINCIPAL INVESTIGATOR** University of Washington Hands View Video (Proposal # PAQ4EQGB, Contract Value: $8,010)
12/20 – 02/21	Battelle Memorial Institute **CO-PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Battelle - Speeding (Proposal # P5XKY2UY, Contract Value: $9,672)
11/20 – 01/21	Humn Ai **CO-PRINCIPAL INVESTIGATOR** Time Series Data to Model Driver Behavior (Proposal # PYHMTLPA, Contract Value: $26,905)
10/20 – 04/25	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Phase II – SHRP 2 Safety Data Implementation and Oversight (Proposal # PH443OR6, Contract Value: $2,024,118)
09/20 – 07/22	National Highway Traffic Safety Administration **PRINCIPAL INVESTIGATOR** Identification and Assessment of Options, Manner, and Effects of Drivers' Potential Involvement in Enabling/Disabling Vehicle Connectivity Pathways (Proposal # P345CTQZ, Contract Value: $315,117)
09/20 – 10/20	Fabrikm **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Time Series for Fabrikm (Proposal # PQJXE3OK, Contract Value: $3,593)
09/20 – 07/21	Battelle Memorial Institute **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Battelle FHWA Pooled Fund Pedestrians Study (Proposal # PTTEWUD5, Contract Value: $8,774)
09/20 – 02/21	Federal Highway Administration **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for University of Buffalo/FHWA – HVCs (Proposal #PVFJUXUR, Contract Value: $19,386)
08/20 – 10/20	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Independent Review of an Electronic Product Intended for In-vehicle Use (Proposal #P46VZOK7, Contract Value: $25,000)

07/20 – 12/20	University of Central Florida **PRINCIPAL INVESTIGATOR** Mental Frameworks Underlying Driver Behavior in Complete Streets Applications for UCF (Proposal #PMZ3V4R6, Contract Value: $25,000)
07/20 – 08/20	Texas Transportation Institute **PRINCIPAL INVESTIGATOR** TTI SHRP 2 Event Data (Proposal #PRPKHNUF, Contract Value: $1,006)
07/20 – 06/21	National Science Foundation **PRINCIPAL INVESTIGATOR** SCC-PG: JST: Green Low-Speed Mobility in an Aging Society (Proposal #PXL23IIM, Contract Value: $74,975)
06/20 – 08/21	Federal Highway Administration **CO-PRINCIPAL INVESTIGATOR** FHWA Intersection Time Series Data (Proposal #PED3GUXO, Contract Value: $21,847)
05/20 – 03/22	Major Automotive Company **CO-PRINCIPAL INVESTIGATOR** Evaluation of Driver's Eye Glance Patterns on Non Controlled Access Roadways: An Analysis Using VCC50 Naturalistic Driving Data EOR Algorithm Evaluation (Contract Value: $189,483)
05/20 – 10/20	Federal Highway Administration **PRINCIPAL INVESTIGATOR** SHRP 2 Safety Data Baseline Oversight Services (Proposal #PNEFSSL3, Contract Value: $249,998)
05/20 – 06/20	Iowa State University **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data for Iowa State Smart Work Zones (Proposal #PAFYN2ZZ, Contract Value: $2,127)
04/20 – 01/22	iTHRIV **CO-PRINCIPAL INVESTIGATOR** When can patients safely drive after rotator cuff repair? (Proposal #PWTKB55B, Contract Value: $81,056)
04/20 – 06/20	Henry Jackson Foundation **CO-PRINCIPAL INVESTIGATOR** BHSAI Drowsy Driving (Proposal #PRPRFI6T, Contract Value: $2,168)

04/20 – 11/20	Nuro **PRINCIPAL INVESTIGATOR** Estimating crash risk for occupant-free automated vehicles (Proposal #PH7TANEU, Contract Value: $74,515)
03/20 – 07/20	United States Department of Transportation **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data to Estimate the Effects of Traffic Management Techniques on Driver Behavior (Proposal #PEGZLSUI, Contract Value: $61,735)
01/20 – 02/20	Auburn University **CO-PRINCIPAL INVESTIGATOR** Left Turns at Unsignalized Intersections for Auburn (Proposal #PDRWIASR, Contract Value: $9,602)
01/20 – 02/20	Auburn University **CO-PRINCIPAL INVESTIGATOR** Evaluation of Work Zone Mobility, Phase 2 (Proposal #PLRQOLMF, Contract Value: $8,999)
12/19 – 03/20	Zenuity **CO-PRINCIPAL INVESTIGATOR** Zenuity AB Cut-ins (Proposal #PTIQKNDI, Contract Value: $8,257)
10/19 – 03/20	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Drowsiness Detection Algorithm (Proposal #P4QVBRCZ, Contract Value: $50,000)
09/19 – 02/20	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Hydroplaning Follow-On Project (Proposal #PNYMKMMA, Contract Value: $40,277)
10/19 – 09/22	Federal Highway Administration **PRINCIPAL INVESTIGATOR** STAC Support – Phase III (Proposal #P25TOHUO, Contract Value: $192,058)
08/19 – 10/19	Ben Gurion University **CO-PRINCIPAL INVESTIGATOR** Ben Gurion Univerity of the Negev - Driver Behavior Analysis through CAN Bus Data (Proposal #PGW54QW4, Contract Value: $6,633)
08/19 – 11/20	Waymo **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Waymo Stopped Vehicle Epochs (Proposal #PPKG62VX, Contract Value: $152,729)

07/19 – 08/20	National Institute of Child Health & Human Development **PRINCIPAL INVESTIGATOR** Practice Driver Dataset Availability for STAC Short Title: NIH STAC (Proposal #PREFPTDN, Contract Value: $38,640)
07/19 – 11/19	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for ISU - Work Zone Safety - Phase III IAP (Proposal #PIVBQR2H, Contract Value: $21,700)
07/19 – 08/19	Aioi Nissay Dowa Insurance Services USA Corp. **CO-PRINCIPAL INVESTIGATOR** Toyota IMS Safety Events (Proposal #PIAH75BV, Contract Value: $11,013)
07/19 – 08/19	Proprietary Sponsor **CO-PRINCIPAL INVESTIGATOR** Vehicle Dynamics of Driver Behaviors (Proposal #PITMFLDM, Contract Value: $7,421)
07/19 – 10/19	Cambridge Mobile Telematics **CO-PRINCIPAL INVESTIGATOR** Cambridge Mobile Telematics Stop Location (Proposal # PILEQUW6, Contract Value: $13,569)
05/19 – 06/19	Tsinghua University **CO-PRINCIPAL INVESTIGATOR** Tsinghua University Crash Characteristics (Proposal # PICTX3GN, Contract Value: $1,631)
05/19 – 09/19	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Analysis of Gap between Vehicles in Naturalistic Traffic (Proposal #PL65MV5V, Contract Value: $19,327)
04/19 – 05/19	University of Nevada – Reno **CO-PRINCIPAL INVESTIGATOR** UNR Bridge Work Zones Hao Short Title: Bridge Work Zones (Proposal # PUFPZI4B, Contract Value: $999)
04/19 – 05/19	Transanalytics, LLC **CO-PRINCIPAL INVESTIGATOR** Older Driver Synthesis (Proposal #PXXX325Z, Contract Value: $4,220)
03/19 – 08/19	Proprietary Sponsor **CO-PRINCIPAL INVESTIGATOR** Assessment of Vehicle Following with Risk Feeling (Proposal #PMX2ASJJ, Contract Value: $24,804)

03/19 – 04/19	University of Siegen **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data for University of Siegen (Proposal #PUPKGGEM, Contract Value: $3,809)
03/19 – 04/19	Ohio State University **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Ohio State University - Intersections (Proposal #PIFUXV2D, Contract Value: $4,569)
02/19 – 06/19	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Technical Advisory Committee (TAC) – Transportation Pooled Fund Study # TPF-5(361): SHRP2 Naturalistic Driving Study Pooled Fund: Advancing Implementable Solutions (Proposal #PU7JPPRW, Contract Value: $24,994)
01/19 – 03/19	Technische Universität Dresden **CO-PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Dresden University of Applied Sciences (Proposal #PBCCEQVY, Contract Value: $5,123)
12/18 – 02/19	Swiss Re **CO-PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Swiss Re – Speed Distribution (Proposal #PWBBP3QP, Contract Value: $8,125)
12/18 – 01/19	MEA Forensics **CO-PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for MEA Forensics - Intersection (Proposal #PKUV7ELB, Contract Value: $2,842)
09/18 – 04/19	Iowa State University **CO-PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Iowa State University - Rural Intersections Phase 2 (Proposal #POXMZB3O, #POK6IBZ6, Contract Value: $32,230)
09/18 – 10/18	Auburn University **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Workzone Radar Data (Proposal #PC7DML5A, Contract Value: $2,261)
08/18 – 09/18	Saskatchewan Government Insurance **CO-PRINCIPAL INVESTIGATOR** Canada NDS Support for Saskatchewan Government Insurance (Proposal #PNFJP3CF, Contract Value: $2,881)

08/18 – 02/19	Oak Ridge National Laboratories **CO-PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Oak Ridge National Laboratories - High Resolution, Time-Series Driver Data for Selected Intersection Traversals (Proposal # PBYVDVYP, Contract Dollar Value: $12,996)
07/18 – 06/19	Proprietary Sponsor **CO-PRINCIPAL INVESTIGATOR** Joint FY18 Study between _____ and VTTI: Establishing Database Access for Understanding Driver Behavior (Proposal # PYJER2O3, Contract Dollar Value: $282,419)
08/18 – 11/18	Oak Ridge National Laboratories **PRINCIPAL INVESTIGATOR** Application of Connected Vehicle Privacy Protection Algorithm on Strategic Highway Research Program 2 (SHRP2) Data (Proposal # PQ7BKYIW, Contract Dollar Value: $27,149)
09/18 – 11/18	Sfara, Inc. **CO-PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Sfara Inc. (Proposal #P5GXOYJ4, Contract Dollar Value: $11,012)
08/18 – 09/18	IAOV Chemnitz **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for IAOV GmbH (Proposal #P3JBZUAN, Contract Dollar Value: $4,059)
07/18 – 08/18	University of Missouri **CO-PRINCIPAL INVESTIGATOR** SHRP2 Data Support for University of Missouri – BAA Project – Intersection Dataset (Proposal #PZBVRDAM, Contract Value: $3,210)
07/18 – 08/18	Carleton University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Carleton (Proposal #PIMQWTWF, Contract Value: $7,011)
06/18 – 11/18	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Firefly Rates (Proposal #P6P6ZII5, Contract Value: $45,000)

06/18 – 12/18	University of Melbourne – Bastagia **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Bastagia (Proposal #PIAF3KGI, Contract Value: $24,928)
06/18 – 08/18	MAN Truck & Bus AG **PRINCIPAL INVESTIGATOR** Provision of Drowsiness Scores for Selected Simulated Driving Video Using the Observer Rating of Drowsiness Protocol (Proposal #PE2A7X7U, Contract Value: $4,056)
05/18 – 07/18	Fiat-Chrysler Americas **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for FCA (Proposal #PLCSI5SP, Contract Value: $23,620)
04/18 – 05/18	Crash Safety Research Center, LLC **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Crash Safety Research Center – Perception-Response Time (Proposal #P2TM2EP6, Contract Value: $3,581)
03/18 – 05/18	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for InTrans/ISU – Speed and Road Geometry – Phase II IAP – Follow-on (Proposal #PVT47OND, Contract Value: $29,698)
03/18 – 04/18	Arity – A Subsidiary of AllState Insurance **PRINCIPAL INVESTIGATOR** SHRP 2 Data Use Support for AllState Insurance – Fast Accelerometer (Proposal #PV6WFM6H, Contract Value: $1,919)
03/18 – 04/18	Johns Hopkins University **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for Johns Hopkins University (Proposal #PRXYDDAB, Contract Value: $2,452)
03/18 – 04/18	Cambridge Mobile Telematics **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for Cambridge Mobile Telematics (Proposal #PP4U6TQV, Contract Value: $8,399)
03/18 – 04/18	Universidad del País Vasco **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for UPV/EHU (Proposal #P3AGNSWI, Contract Value: $3,906)

03/18 – 04/18	Children’s Hospital of Philadelphia **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for Children’s Hospital of Philadelphia – Older Driver Dataset (Proposal #P5VRLV6B, Contract Value: $8,222)
03/18 – 04/18	TransAnalytics, LLC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for TransAnalytics – Younger Drivers (Proposal # PSNOWE3A, Contract Dollar Value: $5,519)
03/18 – 04/18	National Chiao Tung University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for National Chiao Tung University – Additional Data (Proposal # PYHJWBJT, Contract Dollar Value: $4,287)
02/18 – 12/18	eDriving, LLC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for eDriving (Proposal #PDVHE7XX, Contract Value: $49,144)
02/18 – 03/18	Waymo **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for Waymo (Proposal #PSCZN4WQ, Contract Value: $8,171)
02/18 – 12/19	Federal Highway Administration **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for FHWA - HVCs (Proposal #PDBGQFEJ, Contract Value: $18,333)
01/18 – 03/18	Honda R&D **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Honda R&D Co. (Proposal #PMNJXOVL, Contract Value: $75,285)
01/18 – 02/18	TransAnalytics, LLC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for TransAnalytics, LLC – Vulnerable Road Users (Proposal #PEAOEUBS, Contract Value: $7,917)
01/18 – 02/19	Purdue University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Purdue University – Additional Data (Proposal #PHSKFBJP - #PYX3EK3X, Contract Value: $5,486)

01/18 – 02/18	Auburn University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Auburn University – Additional Data (Proposal #PL6WPHIP, Contract Value: $3,878)
12/17 – 09/20	Proprietary Sponsors **CO-PRINCIPAL INVESTIGATOR** Automated Mobility Partnership (Proposal # P34S5W3U, Contract Value: $9,175,001)
12/17 – 01/18	Fleetmatics **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Fleetmatics (Proposal #P7I2BILZ, Contract Value: $22,402)
11/17 – 04/18	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Iowa State University – Work Zones Phase II IAP – Additional Data (Proposal #P4WT5BMS, Contract Value: $67,697)
11/17 – 07/18	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Iowa State University – Roadway Departures Phase II IAP – Additional Data (Proposal #P5T65LKG, Contract Value: $45,893)
11/17 – 03/18	University of Massachusetts - Amherst **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for University of Massachusetts - Amherst – Older Drivers (Proposal #PKGVRZRY, Contract Value: $7,887)
11/17 – 08/18	The University of Michigan **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for The University of Michigan – Phase II BAA Project (Proposal #PMVPSDYD, Contract Value: $28,618)
11/17 – 01/18	Honda Research Institute – Europe **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for HRI-EU (Proposal #PCEYY2HH, Contract Value: $46,768)
11/17 – 12/17	Arity – A Subsidiary of AllState Insurance **PRINCIPAL INVESTIGATOR** SHRP 2 Data Use Support for AllState Insurance (Proposal # P3WATM2S, Contract Value: $9,715)

10/17 – 12/17	Massachusetts Institute of Technology **PRINCIPAL INVESTIGATOR** SHRP 2 Data Use Support for MIT – Xin Huang (Proposal # P7RT54JE, Contract Value: $4,227)
10/17 – 09/19	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Providing Technical Support for SHRP2 Naturalistic Driving Study (NDS) data – Maintaining Secure Remote Data Access for Safety Training and Analysis Center (STAC) (Contract # DTFH6116D00041/0002, Contract Value: $371,492)
10/17 – 11/17	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Travel Patterns (Proposal #P3PNCPV6, Contract Value: $51,206)
10/17 – 11/17	Swiss Re **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Swiss Re – Additional Data (Proposal #PDJQNQXE, Contract Value: $17,115)
09/17 – 12/20	Oak Ridge National Laboratories **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for ORNL – Computer Vision Measurements (Proposal #PVMB2RX7, Contract Value: $106,065)
09/17 – 02/19	CUBRC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for CUBRC – High-visibility crosswalks in New York State (Proposal #PBBCT5TS, Contract Value: $23,922)
09/17 – 10/17	Hyundai Fire & Insurance **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Hyundai Fire & Insurance (Proposal #P4P2JKYB, Contract Value: $1,627)
09/17 – 10/17	Queen’s University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Queen’s University (Proposal #PFX3HAT6, Contract Value: $10,136)
08/17 – 11/17	Michelin **CO-PRINCIPAL INVESTIGATOR** Investigating Hydroplaning in SHPR 2 NDS Data (Proposal #P5EMTY25, Contract Value: $48,425)

06/17 – 07/17	North Carolina A&T University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for North Carolina A&T (Proposal #PUGCC4B6, Contract Value: $5,364)
06/17 – 07/17	CUBRC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for CUBRC – BAA Project – High Visibility Enforcement – Phase II (Proposal #PCEDERXN, Contract Value: $7,453)
06/17 – 07/17	Purdue University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Purdue – Following Behavior (Proposal # PINDLLOA, Contract Dollar Value: $11,299)
06/17	Crash Safety Research Center, LLC **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Crash Safety Research Center – Lead Vehicles (Proposal # PQ2S3JH5, Contract Dollar Value: $3,323)
05/17 – 07/17	Federal Highway Administration **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Federal Highway Administration – Jose Calvo (Proposal # PCB32ZN3, Contract Dollar Value: $2,855)
05/17	University of Virginia **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for University of Virginia – Inki Kim (Proposal # PLPRCICY, Contract Dollar Value: $807)
04/17 – 05/17	NEC **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for NEC – Crash Events (Proposal # P7BQEJD2, Contract Dollar Value: $3,237)
04/17 – 05/17	University of Missouri -Columbia **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for University of Missouri – Younger Driver Events (Proposal # PRCKZL4M, Contract Dollar Value: $5,761)
04/17 – 05/17	National Chiao Tung University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for National Chiao Tung University (Proposal # PH4MUBDG, Contract Dollar Value: $2,820)

04/17	TrueMotion **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for TrueMotion – Event Detail Table (Proposal # PZYBFGOL, Contract Dollar Value: $4,016)
03/17 – 04/17	Rensselaer Polytechnic Institute **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for RPI (Proposal # PCQPLUZT, Contract Dollar Value: $3,416)
03/17 – 04/17	Neusoft Corporation **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Neusoft (Proposal # PEUFZCMD, Contract Dollar Value: $3,825)
03/17	South Dakota State University **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for South Dakota State University (Proposal # PQHMRX2J, Contract Dollar Value: $10,982)
02/17 – 07/17	Michigan Tech **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Michigan Tech – Full Request (Proposal # PUMM5RIO, Contract Dollar Value: $23,486)
02/17 – 03/17	Panasonic **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Panasonic (Proposal # PGPOBE7L, Contract Dollar Value: $17,939)
01/17 – 02/17	IAOV Chemnitz **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for IAOV Chemnitz – RQ 2 (Proposal # PPGTA752, Contract Dollar Value: $8,382)
01/17	Asia University **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Asia University (Proposal # PAQRAHTC, Contract Dollar Value: $2,978)
12/16 – 02/17	National Highway Traffic Safety Administration (through Westat) **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Westat - ORD (Proposal # PFVPCHBW, Contract Dollar Value: $31,685)
12/16 – 03/17	Alliance of Automobile Manufacturers **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for AAM – RADAR Data Extraction (Proposal # PCLNEKED, Contract Dollar Value: $4,376)

11/16 – 01/24	United States Department of Transportation – Office of the Assistant Secretary for Research and Technology **CO-PRINCIPAL INVESTIGATOR** National Safety University Transportation Center – SAFE-D (Proposal # PJAOSCOI, Grant No. 69A3551747115 Contract Dollar Value: $16,936,100)
11/16 – 07/17	University of North Carolina **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for U. of North Carolina – IAP Phase II (Proposal # PTSIXH6P, Contract Dollar Value: $40,545)
11/16	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for CTRE/ISU – BAA Project – Rural Intersections – Modification 1 (Proposal # PPEMECSQ, Contract Dollar Value: $4,766)
11/16	DENSO Corporation **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for DENSO (Proposal # PEI3WTQS, Contract Dollar Value: $2,802)
11/16	Auburn University **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Auburn University (Proposal # POCAO5XI, Contract Dollar Value: $6,691)
11/16	University of Toronto **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for University of Toronto (Proposal # PU6C2INY, Contract Dollar Value: $2,980)
10/16 – 02/17	University of South Florida **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for University of South Florida – IAP Phase II Project (Proposal # P7S4MAX3, Contract Dollar Value: $40,000)
10/16 – 06/17	University of Utah **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for University of Utah – IAP Phase II Project (Proposal # PZWZLQ6A, Contract Dollar Value: $46,560)

10/16	University of Missouri -Columbia **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for University of Missouri – Event Table (Proposal # PRGH7BIO, Contract Value: $4,107)
10/16 – 01/17	IAOV Chemnitz **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for IAOV Chemnitz – Secondary Task and Drowsy Impairment Case Crossover (Proposal # PFWXMXJY, Contract Value: $44,984)
10/16 – 11/16	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for ISU – Road Departures – Phase II IAP (Proposal # PYOCZOSG, Contract Value: $33,839)
09/16 – 12/16	The MITRE Corporation **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for MITRE (Proposal # PZANVUIN, Contract Value: $26,770)
09/16 – 09/21	Federal Motor Carrier Safety Administration **PRINCIPAL INVESTIGATOR** FMCSA Research Data Repository (Contract # DTMC-7514-D000-11L, Task Order 7005, Contract Value: $365,460)
09/16	University of Michigan **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for the University of Michigan – BAA Project - Workzones (Proposal # PM3Z4LXT, Contract Value: $3,186)
09/16	TransAnalytics, LLC **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for TransAnalytics, LLC – Cognitive Function (Proposal # PAOCWWMJ, Contract Value: $1,653)
08/16 – 09/16	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support (Proposal # PUU2S3NR, Contract Value: $24,870)
08/16 – 09/16	Federal Highway Administration **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Federal Highway Administration – Wei Zhang (Proposal # PAOKDCQT, Contract Value: $3,395)

08/16	Zoox, Inc. **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Zoox (Proposal # PBJGZWPC, Contract Value: $5,722)
07/16-09/18	MRI Global **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for MRI Global –Phase I BAA (Phase I Proposal # PI6MX3KT, Contract Value: $9,288; Phase II Proposal # PJGUTD7Q, Contract Value: $43,779)
07/16-11/17	Battelle Memorial Institute **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Battelle –Phase II IAP (Proposal # PO35LO2H, Contract Value: $101,272)
07/16-09/16	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for ISU – Work Zone Safety – Phase II IAP (Proposal # PHLRHT34, Contract Value: $40,789)
07/16	University of North Florida **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for University of North Florida (Proposal #P6Y6W3PP, Contract Value: $1,973)
07/16	TrueMotion **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for TrueMotion (Proposal #PF7O3AQY, Contract Value: $1,962)
07/16	Michigan Technological University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Michigan Tech – Follow-On Work (Proposal #PHWESO54, Contract Value: $4,460)
07/16	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for InTrans/ISU – Speed and Road Geometry – Phase II IAP (Proposal #PPQFSZNV, Contract Value: $22,819)
06/16	Children's Hospital of Philadelphia **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for Children's Hospital of Philadelphia – Follow-On Requests (Proposal #PJLQZXCF, Contract Value: $15,309)

06/16	University of Missouri **PRINCIPAL INVESTIGATOR** SHRP2 Data Support for University of Missouri – Broad Agency Announcement (Proposal #PXWIPF34, Contract Value: $544)
06/16	TransAnalytics, LLC **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for TransAnalytics, LLC – Pedestrians and Cyclists (Proposal # PDTZLZJ6, Contract Value: $4,067)
05/16 – 09/16	Ohio State University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Ohio State University (Proposal #PN5R6UXJ, Contract Value: $1,978)
05/16 – 06/16	Westat **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Westat, Inc. (Proposal #P52SA7VU, Contract Value: $14,284)
05/16 – 06/16	Texas A&M University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for SHRP 2 Data Support for Texas A&M University (Proposal #PRKNO3P3, Contract Value: $14,357)
05/16	Crash Safety Research Center **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Crash Safety Research Center, LLC, Study #2 (Proposal # PKWVYIZK, Contract Value: $1,713)
05/16	Carleton University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Carleton University (Proposal #P3JBZUAN, Contract Value: $4,084)
05/16	Louisiana State University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for LSU (Proposal #PH2PWTQW, Contract Value: $13,532)
05/16	NREL **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for NREL (Proposal #PQRGG4LL, Contract Value: $1,160)

05/16	Florida State University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Florida State University (Proposal #PW45YRFK, Contract Value: $904)
04/16 – 8/16	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support (Proposal #PO6G6V5E, Contract Value: $11,512)
04/16 – 10/16	Federal Highway Administration **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Federal Highway Administration – John Ivan (Proposal #PDK52GXE, Contract Value: $20,853)
04/16 – 05/16	Loughborough University **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for Loughborough University (Proposal # PFAYVYFY, Contract Value: $11,296)
04/16 – 05/16	University of Massachusetts, Lowell **PRINCIPAL INVESTIGATOR** SHRP2 NDS Data Support for University of Massachusetts, Lowell (Proposal # P4INPDPK, Contract Value: $7,877)
04/16	Swiss Re **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Swiss Re (Proposal #P4ANGLAC, Contract Value: $24,697)
02/16 – 10/16	Battelle Memorial Institute **PRINCIPAL INVESTIGATOR** BAA Project - SHRP 2 Data Support for Battelle – Dilemma Zone (Proposal #PX4BNL2X, Contract Value: $19,199)
04/16 – 06/16	Iowa State University **PRINCIPAL INVESTIGATOR** BAA Project - SHRP 2 Data Support for CTRE – Rural Intersections (Proposal #PEMKYF2R, Contract Value: $18,937)
04/16	NEC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for NEC – Processed RADAR Data (Proposal #PBEK6DJ5, Contract Value: $2,262)
04/16	Nauto, Inc. **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Nauto – Trip Summary Table (Proposal #P5G3KWQT, Contract Value: $934)

01/16 – 04/16	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Proprietary Sponsor (Proposal #P6DP5WC2, Contract Value: $38,085)
03/16	University of Washington **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for University of Washington (Proposal #PQ6IIO7Q, Contract Value: $10,077)
03/16	University of Alabama Birmingham Medical Center **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for UABMC (Proposal #PYMHEQL5, Contract Value: $7,870)
03/16 – 04/16	CUBRC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for CUBRC – BAA Project – High Visibility Enforcement (Proposal #P6QDQDA4, Contract Value: $13,039)
03/16	Brigham Young University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for BYU (Proposal #PPUIYQPD, Contract Value: $1,368)
03/16	TransAnalytics, LLC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for TransAnalytics – Location Support (Proposal #PECRLJBI, Contract Value: $4,592)
02/16 – 03/18	University of Wyoming **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for the University of Wyoming – IAP Phase II (Proposal #PXMX4P5Z, Contract Value: $37,980)
02/16 – 04/16	Leidos **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Leidos (Proposal #P5NX54XO, Contract Value: $15,794)
02/16	Korea Advanced Institute of Science and Technology **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for KAIST (Proposal #PH5F7OBM, Contract Value: $14,345)

02/16	University of Saskatchewan **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for University of Saskatchewan (Proposal #PBEQOMR6, Contract Value: $3,214)
01/16	Federal Highway Administration **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for FHWA – Robert Kluger (Proposal #PGFR26RL, Order #DTFH-6116-P-00006, Contract Value: $3,875)
12/15 – 02/17	Major Automotive Corporation **PRINCIPAL INVESTIGATOR** Avoidance Maneuvers (Proposal #PYKK6L6H, Order #6000018645-4200109350, Contract Value: $165,000)
12/15 – 03/16	Nauto, Inc. **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Nauto – Event Detail Table (Proposal #P4XYWVSY, Contract Value: $15,337)
10/15 – 01/16	Clemson University **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Clemson University (Proposal #PTPQRB76, Contract Value: $4,359)
09/15 – 03/16	Children’s Hospital of Philadelphia **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Children’s Hospital of Philadelphia (Proposal #PHDXNIZJ, Contract Value: $33,107)
08/15 – 01/16	Rutgers **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Rutgers (Proposal #PID3HNZL, P.O. # 2220808, Contract Value: $16,824)
07/15 – 08/15	Michigan Tech **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Michigan Tech (Proposal #PJ4DIU2E, Contract Value: $5,442)
06/15 – 08/15	Southwest Research Instittute **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for SwRI (Proposal #PYPJS5NH, Purchase Order # H68212J, Contract Value: $9,268)

06/15 – 01/16	IOAV Chemnitz **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for IOAV Chemnitz (Proposal #PZFWVKVJ, Contract Value: $44,707)
06/15 – 10/15	University of Nevada - Reno **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for UNR (Proposal #PUXDKLJL, Purchase Order # 15DA200634, Contract Value: $9,663)
06/15 – 10/15	NEC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for NEC (Proposal #PYW7ONRS, Contract Value: $33,738)
06/15 – 07/15	TransAnalytics, LLC **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for TransAnalytics, LLC (Proposal #PULIQLQD, Contract Value: $12,901)
05/15 – 10/15	Michelin Americas Research Company **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Michelin (Proposal #PA4FSFNA, Contract Value: $45,633)
05/15 – 09/15	University of Utah **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for Utah (Proposal #PYQETO3Z, Contract Value: $19,343)
05/15 – 01/16	University of Nevada - Reno **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for UNR (IAP) (Proposal #PICXAMSO, Purchase Order # 15DA200634, Contract Value: $46,211)
05/15 – 09/15	University of North Carolina **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for UNC (PO # Y15MTS0838, Proposal # 15-2177-04, Contract Value: $16,792)
02/15 – 11/15	University of Wyoming **PRINCIPAL INVESTIGATOR** SHRP 2 Data Support for University of Wyoming (Prime Award Number: RS04215, Subaward 1002621, Contract Value: $11,011)

05/15 – 09/15	University of South Florida **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for CUTR, University of South Florida (Proposal # PL5AUSC5 Contract Value: $21,001)
03/15 – 06/15	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Iowa State University – Work Zones (Proposal # 15-2081-03 Contract Value: $11,598)
03/15 – 06/15	Iowa State University **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Iowa State University – Roadway Departures (Proposal # 15-1984-03 Contract Value: $14,918)
03/15 – 12/15	Battelle Memorial Institute **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for Battelle IAP Project (Proposal # 15-2085-03 Contract Value: $10,175)
03/15 – 06/15	Wayne State University **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Support for Wayne State University (Proposal # 15-2049-03 Contract Value: $15,388)
03/15 – 08/15	CUBRC **PRINCIPAL INVESTIGATOR** SHRP 2 NDS Data Support for CUBRC, Inc. (PO# 22785 Contract Value: $17,404)
03/15 – 12/17	National Highway Traffic Safety Administration / Battelle Memorial Institute **PRINCIPAL INVESTIGATOR** Support for NHTSA DTNH22-14-R-00027: Characteristics and Predictors of Occasional Seat Belt use Using SHRP 2 Data (Contract No. DTNH22-14-R-00027, Subcontract No. 460108; Contract Value: $82,133)
03/15 – 05/20	The National Academies **CO-PRINCIPAL INVESTIGATOR** Phase I of SHRP 2 Safety Data Implementation and Oversight (SHRP SD-01 Project 031031 5101, PO# SUB0000638; Contract Value: $17,171,652)

12/14 – 1/15	Plymouth Rock Insurance **PRINCIPAL INVESTIGATOR** SHRP 2 data support for Plymouth Rock Insurance (Contract Value: $33,779)
10/14 – 05/17	UT-Battelle – Oak Ridge National Laboratory **PRINCIPAL INVESTIGATOR** SHRP 2 data support for Oak Ridge National Laboratory (Solicitation No. 6400013256, Subcontract No. 4000135335; Contract Value: $65,701)
07/14 – 06/17	National Highway Traffic Safety Administration / Battelle Memorial Institute **PRINCIPAL INVESTIGATOR** SHRP 2 Speeding Data Project (Contract No. DTNH22-11-D-00229/0002, Subcontract No. 429659; Contract Value: $80,231)
05/14 – 10/14	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** A Survey of Rear-end Collisions in Response to a Rapidly Decelerating Lead Vehicle – a SHPR2 Dataset Analysis (Contract No. TCB11775, PR# TCR77256; Contract Value: $74,512)
6/14 – 11/14	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Second Strategic Highway Research Program Safety Databases Training (Contract No. DTFH61-10-D-00023, Task Order No. 5001; Contract Value: $204,035)
1/14 – 01/16	Iowa State University **PRINCIPAL INVESTIGATOR** Evaluating the Relationship between the Driver and Roadway to Address Rural Intersection Safety using the SHRP2 Naturalistic Driving Study Data (Contract Value: $62,868)
09/13 – 02/15	National Institute for Child Health and Human Development / EMMES Corporation **CO-PRINCIPAL INVESTIGATOR** Uniform Naturalistic Teenage Driving Data Set (Subcontract from HHSN275200800002I/HHSN27500010; Contract Value: $683,919)

06/13 – 04/14	The National Academies **CO-PRINCIPAL INVESTIGATOR** Radar Post Processing (NAS 144 Task Order Number 1.6; Contract Value: $500,000)
06/13 – 07/14	The National Academies **PRINCIPAL INVESTIGATOR** S08 Phase II Support for SAFER (NAS 144 Task Order Number 2.2.1; Contract Value: $379,372)
06/13 – 07/14	The National Academies **PRINCIPAL INVESTIGATOR** S08 Phase II Support for MRI Global (NAS 144 Task Order Number 2.2.2; Contract Value: $135,680)
06/13 – 07/14	The National Academies **PRINCIPAL INVESTIGATOR** S08 Phase II Support for CTRE (NAS 144 Task Order Number 2.2.3; Contract Value: $194,887)
04/13 – 12/13	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Frequency of stops in response to stationary vehicles in highway environments- a SHRP 2 data set analysis (Contract No. TCB06281, PR# TCR61378; Contract Value: $74,074)
04/13 – 01/15	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Near Crash Analysis (Contract No. TCB06281, PR# TCR61354; Contract Value: $316,209)
02/12 – 02/14	The National Academies **CO-PRINCIPAL INVESTIGATOR** Data Access Website (NAS 144 Task Order Number 1.1; Contract Value: $34,697)
02/12 – 12/14	The National Academies **CO-PRINCIPAL INVESTIGATOR** Trip Summary Files (NAS 144 Task Order Number 1.2; Contract Value: $906,970)
02/12 – 02/14	The National Academies **CO-PRINCIPAL INVESTIGATOR** Event and Epoch Files for Collisions (NAS 144 Task Order Number 1.3; Contract Value: $410,073)

02/12 – 12/14	The National Academies **CO-PRINCIPAL INVESTIGATOR** User Workshop (NAS 144 Task Order Number 1.5; Contract Value: $103,182)
02/12 – 07/13	The National Academies **CO-PRINCIPAL INVESTIGATOR** S08 Phase 1 Support – Round 1 (NAS 144 Task Order Number 2.1; Contract Value: $221,028)
02/12 – 02/14	The National Academies **CO-PRINCIPAL INVESTIGATOR** Non-SHRP2 User Support (NAS 144 Task Order Number 3; Contract Value: $63,926)
02/12 – 02/13	National Highway Traffic Safety Administration **PRINCIPAL INVESTIGATOR** CellPilot Analysis (NHTSA Contract DTNH22-11-D-00236/0005; Contract Value: $396,012)
09/11 – 09/12	National Highway Traffic Safety Administration **PRINCIPAL INVESTIGATOR** Initial Research on Portable Devices and Voice Interfaces (NHTSA Contract DTNH22-11-D-00236/0002; Contract Value: $137,050)
12/10 – 01/12	National Highway Traffic Safety Administration **PRINCIPAL INVESTIGATOR** Support for NHTSA Visual Manual Guideline (NHTSA Contract DTNH22-05-D-01019, Task Order 33; Contract Value: $383,716)
09/10 – 12/11	National Highway Traffic Safety Administration **CO-PRINCIPAL INVESTIGATOR** Cellphone Pilot (Westat Subcontract No. 8172-S-002, Task Order 5; Contract Value: $847,778)
11/10 – 12/11	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Evaluation of Advanced In-Vehicle Interfaces (Contract No. TCB06281, PR# TCR31475; Contract Value: $58,718)
06/10 – 03/11	Proprietary Sponsor **CO-PRINCIPAL INVESTIGATOR** NK10 (Contract Value: $55,000 - Direct)
03/10 – 12/13	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Drowsy Driver Detection Algorithm Validation (Contract No. TCB06281, PR# TCR26884; Contract Value: $111,061)

01/10 – 12/10	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Evaluation of Multi-Modal User Interface – Follow-up Work (Contract No. TCR25131 1416-04NL; Contract Value: $123,147)
11/09 – 03/10	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Development of Automobile Research Platform (Contract No. TCB06281; Contract Value: $55,998)
10/09 – 12/11	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Attention and Drowsy-Driver Assist (Contract No. DTFH61-06-H-00027; Contract Value: $150,000 - Direct)
07/08 – 07/11	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Human Factors Analysis of Navigation System Destination Entry (Contract No. TCR14717; Contract Value: $141,042)
11/08 – 05/09	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Literature Review on Semi-Autonomous Vehicles (Contract No. TCS24310; Contract Value: $18,208)
11/07 – 12/08	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Naturalistic Usage of Infotainment Systems: Follow-up Work (Contract No. TRC84826; Contract Value: $89,102)
02/07 – 11/08	University of Michigan – Ann Arbor **PRINCIPAL INVESTIGATOR** Site –based Video System Design and Development (Subcontract 3000840432; Contract Value: $90,000) – Project was rescinded due to a change in contractor's duties under the project.
07/07 – 12/11	Federal Highway Administration **PRINCIPAL INVESTIGATOR** Development of a Distraction Index (Contract No. DTFH61-06-H-00027; Contract Value: $50,000 - Direct)
01/07 – 3/09	National Highway Traffic Safety Administration (through Proprietary Sponsor) **CO-PRINCIPAL INVESTIGATOR** Advanced Collision Avoidance Technologies (Contract No. 208-11-30810-404-1; Contract Value: $999,796)

10/06 – 12/07	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Effect of Visual Alert Location on Target Detection (Contract No. TRC84826; Contract Value: $157,643, Follow-up work: $15,174)
10/06 – 4/07	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Evaluation of Multi-Modal User Interface (Contract No. TRC84826; Contract Value: $131,136)
09/06 – 4/09	Proprietary Sponsor **PRINCIPAL INVESTIGATOR** Evaluation of Intervention to Promote Safety Belt Usage in Teen Drivers (Contract No. TRC84826; Contract Value: $300,000)
09/05 – 12/06	Proprietary Sponsor **PROJECT MANAGER** Naturalistic Usage of Infotainment Systems (Contract No. TRC84826; Contract Value: $400,000)
08/02 – 02/06	Virginia Transportation Research Council, Charlottesville, VA **PROJECT MANAGER** Intersection Decision Support (Contract No. VTRC-MOAD-02-007; Contract Value: $1,885,824)
05/02 – 05/05	National Highway Traffic Safety Administration, Washington, D.C. **INVESTIGATOR** Vehicle-Based Countermeasures for Signal and Stop Sign Violations (Contract No. DTNH22-00-C-07007; Contract Value: $1,786,156)
08/01 – 03/05	National Highway Traffic Safety Administration, Washington, D.C. **INVESTIGATOR** The 100-Car Naturalistic Driving Study (Contract No. DTNH22-00-C-07007; Contract Value: $2,645,279)
01/05	Federal Highway Administration, Washington, D.C. **CO-PRINCIPAL INVESTIGATOR** Cooperative Intersection Collision Avoidance Demonstration to the FCC (Contract No. DTFH61-05-P-00043; Contract Value: $9,950)
09/03 – 6/04	Proprietary Sponsor **PROJECT MANAGER** Driver Performance Evaluation and Comparison for Classic and Novel Radio Tasks in a____________(Proprietary)

05/97 – 11/01	Federal Motor Carrier Safety Administration, Washington, D.C. **RESEARCH CONSULTANT** Impact of Sleeper Berth Usage on Driver Fatigue (Contract No. DTFH61-97-C-00068; Contract Value: $914,999)

PROFESSIONAL EXPERIENCE

05/99 – 08/99	Engineering Animation, Inc., Ann Arbor, MI **SOFTWARE ENGINEER - INTERN** Improved modeling techniques used in the corporation's Jack™ software, used to model the behavior of "virtual humans" in a variety of user-defined situations. Improvements dealt primarily with the spine (lumbar, thoracic, and cervical) and shoulder areas of the "virtual human." The suggested modifications were based on data collected from the scientific literature. Developed code for the implementation of the CAESAR anthropometric database into Jack™.
07/96 – 06/97	Techno Plastics Industries, Añasco, PR **PROJECT ENGINEER** Performed operations analysis for all activities in the factory, including inventory planning and control, quality control, materials handling, and safety. Developed corrective measures for faulty items. Trained operators in the above areas. Developed layout for plant expansion already in progress.

PRIVATE CONSULTING EXPERIENCE

03/24 – 06/24	Michael R. Nash, Attorney Provided expert review of data acquisition technology in a fatal light vehicle vs. commercial vehicle crash.
07/23 – 09/23	SciPinion Review panelist on the topic of the "Safety of Autonomous Vehicles."
07/08	Proprietary Client Technical translation of equipment warning labels from English to Spanish.
08/03 – 02/04	International Access Corporation, Washington, DC Report Title: Infrastructure-based and cooperative collision avoidance technologies: Status of U.S. efforts for 2003
08/98	Titmus Optical, Petersburg, VA Conducted an ergonomic audit in the manufacturing floor of a 300+ employees company. Suggested improvements to then current workstations and manufacturing problems. The suggestions resulted in the creation of "operator-friendly" workstations and reduced the probability of product damage.

PROFESSIONAL TRAINING

5/22	Virginia Tech, Blacksburg, VA **Adult First Aid / CPR / AED**
3/20	Virginia Tech, Blacksburg, VA **Media Training**
7/06 – Present	Virginia Tech, Blacksburg, VA **Training in Human Subjects Protection**
4/05	Virginia Tech, Blacksburg, VA **Telescoping Aerial Lifts** Instructor: Robin Miller
8/03	Virginia Tech, Blacksburg, VA **Portable Fire Extinguisher Training** Instructor: Robin Miller
8/03	Virginia Tech, Blacksburg, VA **Fall Protection User Training** Instructor: Robin Miller
8/03	Virginia Tech, Blacksburg, VA **Confined Space Entrant/Attendant Training** Instructor: Robin Miller

INTERNATIONAL COLLABORATIONS

As part of my work, and given the global nature of the automotive business, I regularly engage in proprietary research with multinational major automotive corporations, collaborating with personnel in various parts of the world, including Australia, Germany, Japan, Canada, and Mexico. In addition, as part of my work related to the SHRP 2 Naturalistic Driving Study, I receive requests and collaborate with researchers from around the world, including China, Korea, Japan, India, and Europe.

01/24 – Present	Invited participant in the "Autonomous Vehicle Safety Impact Summit" organized by Waymo, LLC to determine best practices that should be followed in making comparisons between ADS collision rates and other collision benchmarks. The curated international invitee list included participants from Europe, Asia, and America. The group collectively developed a set of guidelines that should be followed to produce reliable and valid research in this area; a peer review process is underway prior to publication. Link to preprint.
01/23 – Present	Served as panelist in the PhD Milestones Confirmation Review Panel for Fletcher Howell, a Ph.D. student at Monash University in Australia under the supervision of Dr. Sjaan Koppel and Dr. David Logan.

12/21	Served as thesis evaluator for Matteo Simoncini, a Ph.D. student at the University of Florence under the supervision of Dr. Fabio Schoen. The title of Mr. Simoncini's dissertation was "Deep learning methods for safety-critical driving events analysis."
01/20	Hosted, in January 2020, a Ph.D. candidate (Óscar Mata Carballeira) from Universidad del País Vasco, in Spain, for a week-long visit to VTTI that exposed him to our resources, research opportunities, and facilities. Full internship was planned but cancelled due to COVID-19
05/19	Executed a formal memorandum of understanding between Virginia Tech and Nagoya University in Japan that intended to "conduct academic exchange in order to develop innovative automotive-related technologies for future society."
05/19	Executed a formal memorandum of understanding, in May 2019, between Virginia Tech and Nagoya University in Japan that intended to "conduct academic exchange in order to develop innovative automotive-related technologies for future society."
10/18	Keynote Address at the DSP in Vehicles conference in Nagoya, Japan.

PROFESSIONAL SERVICE

Reviewed papers for the following journals or conference proceedings:

- Proceedings of the National Academy of Sciences
- Behavioral Sciences
- IEEE Transactions on Intelligent Transportation Systems
- MDPI Safety
- Accident Analysis and Prevention
- Traffic Injury Prevention
- Journal of Safety Research
- Automated Vehicles Symposium
- Human Factors
- Journal of Applied Ergonomics
- IEEE Transactions on Human-Machine Systems
- Ergonomics
- Journal of Applied Biomechanics
- Applied Psychology: an International Review
- Applied Ergonomics
- Transportation Research Part C: Emerging Technologies
- Transportation Research Part F
- International Journal of Industrial Ergonomics
- Transportation Research Board Annual Meeting
- Human Factors and Ergonomics Society (aka, "ASPIRE") Conference Proceedings
- Society of Automotive Engineers
- Ergonomics in Design

- Safety Science
- Technology in Society

Served as a session chair or co-chair in the following conference sessions:
- 65th AAAM Annual Scientific Conference (2021) – *"Drugs/Alcohol/Occupant Factors"*
- Virginia Tech-Wake Forest School of Biomedical Engineering and Sciences Student Symposium (2023) – *"Transportation Safety"*
- 64th Annual Meeting of the Human Factors and Ergonomics Society (2020) – *"Takeover, Failures, and Errors in Automation"*
- DSP in Vehicles (2018)
- 61st Annual Meeting of the Human Factors and Ergonomics Society (2017) – *"Driver Perception, Response, & Performance"*
- 51st Annual Meeting of the Human Factors and Ergonomics Society (2007) – *"Driver Safety Warnings and Alerts"*
- 46th Annual Meeting of the Human Factors and Ergonomics Society (2002) – *"Heavy Vehicles, Alertness, and Emergency Events"*

Regularly serve as an evaluation and/or judge for the following awards:
- Fred M. Young Sr. / SAE Engineering Scholarship, offered by the Society of Automotive Engineers
- CUTC Award for Pikarsky Science and Technology PhD, offered by the Council of University Transportation Centers
- H. Clay Gabler Scholar's Program Award, offered by the Association for the Advancement of Automotive Medicine
- TMC / SAE Donald D. Dawson Technical Scholarship, offered by the Society of Automotive Engineers
- Alphonse Chapanis Award, offered by the Human Factors and Ergonomics Society

04/23 – 06/24	Member, Crash Data Collection and Analysis Standards Committee, Society of Automotive Engineers.
08/22 – Present	Member, EM Graduate Curriculum Committee, Biomedical Engineering and Mechanics Department, Virginia Tech.
01/21 – Present	Member, BME Undergraduate Curriculum Committee, Biomedical Engineering and Mechanics Department, Virginia Tech.
03/20 – Present	Member, Collaborative Partnerships & Engagement Committee, Biomedical Engineering and Mechanics Department, Virginia Tech.
08/19 – Present	Member, Diversity, Equity, and Inclusion Committee, Biomedical Engineering and Mechanics Department, Virginia Tech. Co-chair in academic year 2023-2024.
10/19 – 10/22	Member, Scientific Program Committee of the Association for the Advancement of Automotive Medicine

03/19 – 04/23	Co-Chair, Crash Data Collection and Analysis Steering Committee, Society of Automotive Engineers.
11/18	Exhibitor, Radford City Public Schools 2018 Technology Conference. Exhibit: Autonomous Vehicles – Here Today.
05/18 – 06/19	Member, Strategic Planning Research Subcommittee, Office of the Vice President for Research and Innovation, Virginia Tech.
04/18 – 04/19	Member, Organizing Committee, Choices and Challenges Forum – Self-driving cars in the New River Valley.
04/18	Exhibitor, USA Science & Engineering Festival. Exhibit: Cars Driving Themselves!
10/18 – Present	Student Recruitment (MS and PhD programs). Engineering Mechanics Student Recruitment Weekend (Blacksburg, VA).
10/18	Student Recruitment (MS and PhD programs). Polytechnic University of Puerto Rico and University of Puerto Rico – Mayaguez campus.
07/18	Special Issue Editor: Traffic Safety and Driver Behaviour – *Safety Journal*. Basel, Switzerland: MDPI.
10/18 – Present	Student Recruitment (MS and PhD programs). Biomedical Engineering and Mechanics Student Recruitment Weekend.
10/17 & 10/18	Exhibitor, Virginia Tech Science Festival. 2017 Exhibit: Transportation in a disrupted world - Traveling safe!; 2018 Exhibit: Technology in Motion - How Computers Move Us.
10/17 & 10/18	Selection Committee Member, Chapanis Award, Human Factors & Ergonomics Society
06/17	Panelist, Learning Etiquette Dinner, ExploreVT Summer Experience for Minority Rising High School Senior Students
04/13	Panelist, Review Panel: Partnerships for Innovation: Building Innovation Capacity Program (P141205), National Science Foundation (NSF)
03/09 – Present	Membership Applications Evaluator, Board of Certification in Professional Ergonomics.
07/08 – 11/10	Scholarship Application Evaluator, Hispanic Scholarship Fund.

04/08 – 04/10	Volunteer, Formula SAE at Virginia International Race. Events: Technical Presentation, Acceleration (Assistant Captain), Autocross, and Endurance
10/07 – 10/08	Program Chair, Surface Transportation Technical Group of the Human Factors and Ergonomics Society
04/07 – 03/10	Member, Committee on Vehicle User Characteristics (AND10), Transportation Research Board of the National Academies
10/06 – 10/07	Program Chair Elect, Surface Transportation Technical Group of the Human Factors and Ergonomics Society
11/02 – 11/10	Mentor, Hispanic Scholarship Fund Mentoring Program
11/10 – Present	Mentor, Board of Certification in Professional Ergonomics
01/11 – 02/11	Judge, Spirit of Innovation Awards

SELECTED UNIVERSITY SERVICE

Over the past six years, I have served the university and the department in more than 50 different roles. The list below is limited to recent and/or noteworthy service.

- Member, Promotion and Tenure Committee, Biomedical Engineering and Mechanics Department at Virginia Tech, since July 2024.
- Served as Program Coordinator for the Administrative Suite Summer Internship Program at the Virginia Tech Transportation Institute. In that capacity, oversaw the work of 8 Virginia Tech student interns involved in different administrative functions within the institute, May 20 through July 26, 2024.
- SBES Qualifying Exam Director – Virginia Tech, Virginia Tech – Wake Forest University School of Biomedical Engineering and Sciences, since November 2023.
- Member, Honorifics Committee, Biomedical Engineering and Mechanics Department at Virginia Tech, since November 2023.
- College of Engineering Representatives, Athletics Committee, Virginia Tech, August 2023 until January 2024.
- Member, EM Graduate Curriculum Committee, Biomedical Engineering and Mechanics Department at Virginia Tech, since August 2022.
- Member of a Five-Year Review Committee for the Center of Injury Biomechanics. Chair was Dr. Thomas Dingus; other members of the committee were Dr. Azim Eskandarian and M. Lucas Neurauter.
- Alternate Representative of the Biomedical Engineering and Mechanics Department at the Engineering Faculty Organization, from May 2022 until August 2024.
- Member of the Virginia Tech Institutional Review Board, since January 2022; Board chair is Dr. Andrew Binks (Virginia Tech Carilion School of Medicine).

- Member of a Search Committee for the Executive Director of the Virginia Tech Transportation Institute at Virginia Tech, March 2021 until August 2021; committee chair was Stefan Duma (BEAM).

COMMUNITY SERVICE

05/12 – 05/13 President, Rainbow Riders @ the Corporate Research Center Parent-Teacher Association, Blacksburg, VA

CERTIFICATIONS

- Certified Professional Ergonomist (Certificate #1232)
    - *Board of Certification in Professional Ergonomics: 12/06 – Present*
- Associate Ergonomics Professional
    - *Board of Certification in Professional Ergonomics: 09/03 – 12/06*
- CPR/AED - Adult
    - *American Red Cross: 05/08 – 05/09, 03/22 – 03/23*

MEMBERSHIPS

- Association for the Advancement of Automotive Medicine: 08/18 – Present
- Society of Automotive Engineers: 04/07 – Present
- Alpha Pi Mu, Puerto Rico Alpha Chapter: 05/95 – Present
    - **Puerto Rico Alpha Chapter President** 12/95 - 12/96
- Tau Beta Pi, Puerto Rico Alpha Chapter: 08/95 - Present
- Phi Kappa Phi, Virginia Tech Chapter: 05/96 - Present
- Golden Key National Honor Society: 05/96 - Present
- Human Factors and Ergonomics Society: 08/97 – Present
- American Society of Biomechanics: 01/00 - Present
- Sigma Xi: 04/02 – Present
- Transportation Research Board: 01/04 – Present

HONORS

- Diverse Research Portfolio Award, recognized by the Office of Research and Innovation, Virginia Tech: 10/2023.
- "Golden Pen" Award – Department of Biomedical Engineering and Mechanics, Virginia Tech: 05/2022
- "Golden Pen" Award – Department of Biomedical Engineering and Mechanics, Virginia Tech: 05/2021
- Liviu Librescu Faculty Prize – Department of Biomedical Engineering and Mechanics, Virginia Tech: 05/2021
- Leader in Teaching – Department of Biomedical Engineering and Mechanics, Virginia Tech: 05/2021
- "Golden Pen" Award – Department of Biomedical Engineering and Mechanics, Virginia Tech: 05/2019
- 15 Year Service Award – Virginia Tech: 04/18
- Scholar of the Week – Office of the Vice President for Research, Virginia Tech:

09/13

- 10 Year Service Award – Virginia Tech: 04/13
- National Research Council – Ford Foundation Fellow: 08/99 – 05/02
- Outstanding Graduate Teaching Assistant: 05/99
- Virginia Tech's Graduate Dean's Assistantship: 08/97 - 06/99
- Frederick W. Taylor Award for Best Graduating IE Student: 06/97
- Hispanic Scholarship Fund Scholar: 05/96 – 05/99
- IIE, A.O. Putnam Memorial Scholarship: 05/96
- Distinguished Student, PR Society of Professional Engineers: 05/96

RECORD OF GRADUATE STUDENT ADVISING

I have advised a total of 6 students to completion of their degree (2 PhD, 4 Masters), with 7 students in the pipeline (6 PhDs, all at the Candidate stage, 1 Masters). I currently serve or have served in the committee of 28 students (14 completed PhDs, 6 ongoing; 4 completed Masters, 4 ongoing).

COMMITTEE CHAIR FOR Ph.D. STUDENTS AT VIRGINIA TECH

Student	Title of Thesis	Year	Current Position
S. Haus	Effectiveness of automatic emergency braking for protection of pedestrians and bicyclists in the U.S. / **Received 2nd place award for the Paul E. Torgersen Graduate Student Research Excellence Award (Oral Presentation) at Virginia Tech**	2021	Postdoctoral Researcher, MIT Age Lab
J. Valente	From crash to care: a road towards improved safety and efficiency of emergency medical response **/ Received the 2021 and 2022 Dwight David Eisenhower Transportation Fellowships**	2023	Engineering Consultant, Exponent
N. Britten	TBD **/ Received the 2023 Dwight David Eisenhower Transportation Fellowship**	TBD	Ph.D. Candidate
H. Bragg	Heavy-duty electric vehicle charging infrastructure planning based on vehicle performance and routing considerations	TBD	Ph.D. Candidate
A. Werner	TBD **/ Received the 2023 Dwight David Eisenhower Transportation Fellowship**	TBD	Ph.D. Candidate
P. Terranova	Methodology to predict the safety benefits of emerging advanced rider assistant system (ARAS)	TBD	Ph.D. Candidate
J. Chavez-Orellana	TBD	TBD	Ph.D. Candidate

S. Jain	Assessment and prediction of impairment in driving	TBD	Ph.D. Candidate

Committee Chair for M.S./M.E. Students at Virginia Tech

Student	Title of Thesis	Year	Current Position
N. Britten	An on-road assessment of driver secondary task engagement and performance during assisted & automated driving / **Received the 2021 Outstanding Masters Student in the Grado Department of Industrial and Systems Engineering at Virginia Tech / Received the 2021 and 2022 Dwight David Eisenhower Transportation Fellowships**	2021	Ph.D. Student, Virginia Tech
G. Beale	Radar and LiDAR fusion for scaled vehicle sensing / **Received the 2019 Librescu Memorial Fellowship in the Engineering Mechanics Graduate Program at Virginia Tech**	2021	Research Associate, VTTI
M. Metrey	Effectiveness of compensatory vehicle control techniques exhibited by drivers after arthroscopic rotator cuff surgery	2023	Consultant
E. Crump	Characterizing bicyclists behavior in overtaking scenarios over different road infrastructures	2024	Consultant
M Gizaw	Vehicle Operation and Driving Exposure Characteristics of Sleep Disorder Patients—A Naturalistic Driving Data Analysis	TBD	Ph.D. Candidate

Committee Member for Ph.D. Students at Virginia Tech

Student	Title of Ph.D. Dissertation	Year	Current Position
X. Qu	Development and evaluation of postural control models for lifting motions and balance control	2008	Professor, Institute of Human Factors and Ergonomics, Nanyang Technological University
B. Jia	Influence of prolonged sitting and task demands on lumbar spine loads and muscle fatigue	2013	Associate Professor, Department of Industrial and Manufacturing Systems Engineering, University of Michigan - Dearborn
K. Kusano	Methodology for determining crash and injury reduction from emerging crash prevention systems in the U.S.	2013	Senior Engineering Manager, Toyota North America
H. Kim	Augmented Reality Pedestrian Collision Warning: An Ecological Approach to Driver Interface Design and Evaluation	2017	Assistant Professor, Department of Industrial & Systems Engineering, Oakland University

J. Chen	Driver behavior in car following – The implications for forward collision avoidance	2016	Active Safety Feature Development Engineer, Ford Motor Company
R. Bhagavathula	Effect of intersection lighting design on driver visual performance, perceived visibility, and glare	2015	Senior Research Associate, Center for Infrastructure Based Safety Systems, Virginia Tech Transportation Institute
C. Merenda	TBD	TBD	Ph.D. Candidate
A. Noble	Behavioral adaptation to driving automation systems: guidance for consumer education	2020	Senior UI Safety Lead, Volkswagen Group of North America
W. Tatem	The crash injury risk to rear seated passenger vehicle occupants	2019	Engineer, National Highway Traffic Safety Administration
K. Yates	Protection of rear seat occupants using finite element analysis	2020	Engineer, National Aeronautics and Space Administration
E. Laratonda	TBD	TBD	Ph.D. Student
A. Novotny	Improving e-scooter safety: deployment policy recommendations, optimization of design, and promotion of safe e-scooter riding	2023	Engineering Consultant, Exponent
E. Herbers	TBD	TBD	Ph.D. Candidate
M. Bareiss	Modeling driver and pedestrian behavior from normal driving and crash events in one year of Virginia traffic camera data	2023	Engineering Consultant
M. Teater	The impact of sex, anterior cruciate ligament reconstruction, and sport-specific, game-like factors on limb stiffness and limb stiffness asymmetry during landing	2023	Forensic Consultant
A. Galloway	Assessing effects of object detection performance on simulated crash outcomes for an automated driving system	2023	Engineer, OPEX Corporation
C. Smith	Pedal misapplication: Past, present, and future	2022	Forensic Accident Reconstruction Consultant
Y. Hong	TBD	TBD	Ph.D. Student
S. Cooke	TBD	TBD	Ph.D. Student
E. Buckland	TBD	TBD	Ph.D. Student

COMMITTEE MEMBER FOR M.S./M.E. STUDENTS AT VIRGINIA TECH

Student	**Title of Thesis**	**Year**	**Current Position**
M. Marchese	Non-thesis option	2018	Transportation Engineer, Leidos

S. Liu	The impact of sleep disorders on driving safety – Findings from the SHRP 2 naturalistic driving study	2017	Researcher, Waymo
A. Basantis	Assessing Alternative Approaches for Conveying Automated Vehicle Intentions	2019	Associate Professional Staff, The Johns Hopkins University Applied Physics Laboratory
N. Cherfaoui	Non-thesis option	2023	CytoRecovery, Inc.
T. Libera	TBD	TBD	Ph.D. Candidate
N. Pradeep	Non-thesis option	TBD	TBD
V. Rebholz	TBD	TBD	TBD
N. Jones	TBD	TBD	TBD

PUBLICATIONS

Ph.D. Dissertation

Perez, M. (2005). *Prediction of whole-body lifting kinematics using artificial neural networks*. Unpublished Ph.D. Dissertation, Virginia Polytechnic Institute and State University. Blacksburg, VA.

Master's Thesis

Perez, M. (1999). *Empirical Evaluation of Models Used to Predict Torso Muscle Recruitment Patterns*. Unpublished Master's Thesis. Virginia Polytechnic Institute and State University, Blacksburg, VA.

Book Chapters

Total of 4; 3 as first or senior author

Sarkar, A., Jain, S., Sudweeks, J., & **Perez, M.A**. (2023). Driver attention modeling through evidence accumulation and gaze fixation. In Abut, H., Schmidt, G., Takeda, K., Lambert, J., & Hansen, J.H.L. *Towards Human-Vehicles Harmonization, Volume 3.* Berlin: De Gruyter.

Hurts, K., Angell, L.S., & **Perez, M.A.** (2011). The distracted driver: Mechanisms, models, and measurement. In P. DeLucia (Ed.), *Reviews of Human Factors and Ergonomics*, *Vol. 7*. Santa Monica, CA: Human Factors and Ergonomics Society.

Klauer, S. G., **Perez, M. A.,** & McClafferty, J. (2011). Naturalistic driving studies and data coding and analysis techniques. In B. E. Porter (Ed.), *Handbook of traffic psychology*. Cambridge, MA: Elsevier.

Perez, M. A., Angell, L. S., & Hankey, J. M.. (2010). Naturalistic driving: Crash and near crash surrogate distraction metrics. In G. L. Rupp: *Performance metrics for assessing driver distraction: The quest for improved road safety.* Warrendale, PA, SAE International.

JOURNAL ARTICLES

Total of 36; 24 as first or senior author

1. Witcher, C., Christ, D., Sudweeks, J., & Perez, M.A. (in press). Determination of rates of occurrence for hydroplaning events with naturalistic driving data. *Journal of Safety Research*.

2. Chavez, J., Witcher, C., & Perez, M.A. (in press). Motor vehicle traffic fatalities by race and ethnicity (2010-2021). *Transportation Research Interdisciplinary Perspectives*.

3. Terranova, P., Guo, F., & Perez, M.A. (2023). Impact area and speed effects on powered two-wheeler crash fatality and injury risk. *SAE International Journal of Transportation Safety, 11*(2), 105-111.

4. Terranova, P. & Perez, M.A. (2023). Developing a motorcycle injury risk model for planar collisions: Insights from the motorcycle crash causation study. *Accident Analysis and Prevention, 193*, 107292.

5. Valente, J., Jain, S., Amin, A., & Perez, M.A. (2023). Evaluation of the effectiveness of non-contact respiration rate detection for post-crash care application. *Accident Analysis and Prevention, 193*, 107302.

6. Perez, M.A., Sudweeks, J., Sears, E., Huang, W., Guo, F., & Valente, J. (2022). Differences in frequency of occurrence, event characteristics, and pre-impact vehicle kinematics between crashes, near-crashes, and single vehicle conflicts in a large-scale naturalistic driving study. *Traffic Injury Prevention, 24*(1), 32-37.

7. Badger, A.E., Samuel, L.T., Tegge, A.N., Metrey, M., Tuttle, J.R., Perez, M.A., & Apel, P.J. (2022). Patients who undergo rotator cuff repair can safely return to driving at 2 weeks postoperatively. *The Journal of Bone & Joint Surgery, 104*(18), 1639.

8. Perez, M.A., Sears, S., Valente, J.T., Huang, W., & Sudweeks, J. (2021) Factors modifying the likelihood of speeding behaviors based on naturalistic driving data. *Accident Analysis and Prevention, 159*.

9. Noble, A., Miles, M., Perez, M.A., Guo, F., & Klauer, S. (2021) Evaluating driver eye glance behavior and secondary task engagement while using driving automation systems. *Accident Analysis and Prevention, 151*.

10. Valente, J. & Perez, M.A. (2020). Emergency response to vehicle collisions: feedback from emergency medical service providers. *Safety, 6*(4), 48.

11. Antin, J. F., Wotring, B., Glaser, D., & Perez, M. A. (2020). Investigating lane change behaviors and difficulties for senior drivers using naturalistic driving data. *Journal of Safety Research 74,* 81-87.

12. Thompson Orfield, N.J., Badger, A.E., Tegge, A.N., Davoodi, M., Perez, M.A., & Apel, P.J. (2020). Modeled WALANT does not impair driving fitness: an experimental on-road noninferiority study, *The Journal of Bone & Joint Surgery 102*(18), 1616-1622.

13. Antin, J.F., Lee, S., Perez, M.A., Dingus, T.A., Hankey, J.M., & Brach, A. (2019). Second strategic highway research program naturalistic driving study methods, *Safety Science 119,* 2-10.

14. Dingus, T.A., Owens, J.M., Guo, F., Fang, Y., Perez, M.A., McClafferty, J., Buchanan-King, M., & Fitch, G.M. (2019). The prevalence of and crash risk associated with primarily cognitive secondary tasks, *Safety Science 119*, 98-105.

15. Liu. S., Perez, M.A., & Lau, N. (2018). The impact of sleep disorders on driving safety – findings from the SHRP 2 Naturalistic Driving Study, *Sleep 41,* 4: 11.

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NON-PROPRIETARY TECHNICAL REPORTS

Total of 40; 20 as first or senior author

1. Valente, J., Terranova, P., & Perez, M.A. (2024). *Creating a dataset of naturalistic ambulance driving: a pilot study of two ambulances*. Report No. 24-UP-152, Blacksburg, VA: National Surface Transportation Safety Center for Excellence.

2. Li, Y., Kassing, A., Medina, A., Gibbons, R., & Perez, M.A. (2024). *Freeway guide sign performance at complex interchanges: reducing information overload.* Report No. FHWA-HRT-24-070, Washington, DC: Federal Highway Administration.

3. Werner, A. & Perez, M.A. (2024). *Temporary disability: development of an evaluation framework*. Report No. 24-UI-148, Blacksburg, VA: National Surface Transportation Safety Center for Excellence.

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5. Perez, M.A. & Werner, A. (2023). *The influence of COVID-19 policies on driving patterns.* Report No. 23-UI- 131, Blacksburg, VA: National Surface Transportation Safety Center for Excellence.

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7. Perez, M.A., Andrews, J., Wendling, B., Duran, A., & Kimmel, S. (2021). *Identification and assessment of options, manner, and effects of drivers' potential involvement in enabling/disabling vehicle connectivity pathways: Task 4 memorandum: Feasibility assessment and implication identification and analysis.* Blacksburg, VA: Virginia Tech Transportation Institute.

8. Kimmel, S., Andrews, J., Wendling, B., Duran, A., & Perez, M.A. (2021). *Identification and assessment of options, manner, and effects of drivers' potential involvement in enabling/disabling vehicle connectivity pathways: Task 3 memorandum: development of concepts and assessment of technical feasibility of connectivity and intervention options.* Blacksburg, VA: Virginia Tech Transportation Institute.

9. Kimmel, S., Wendling, B., Gilsenan, J., Vanderveen, M., Duran, A., & Perez, M.A. (2021). *Identification and assessment of options, manner, and effects of drivers' potential involvement in enabling/disabling vehicle connectivity pathways: Task 2 memorandum: Characterization of current and emerging vehicle connectivity features.* Blacksburg, VA: Virginia Tech Transportation Institute.

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13. Hankey, J. M., Perez, M. A., & McClafferty, J. A. (2016). *Description of the SHRP 2 naturalistic database and the crash, near-crash, and baseline data sets*. Blacksburg, VA: Virginia Tech Transportation Institute.

14. McClafferty, J. A., Perez, M. A., & Hankey, J. M. (2016). *Identification of consented driver trips in the SHRP 2 naturalistic driving study data set*. Blacksburg, VA: Virginia Tech Transportation Institute.

15. Blanco, M., Atwood, J., Russell, S., Trimble, T., McClafferty, J., & Perez, M. A. (2016). *Automated vehicle crash rate comparison using naturalistic data.* Blacksburg, VA: Virginia Tech Transportation Institute.

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CONFERENCE PROCEEDINGS (REFEREED)

1. Chavez, J & Perez, M.A., 2023: *Motor vehicle traffic fatalities by race and ethnicity (2010 – 2019).* Paper presented at the Proceedings of the Transportation Research Board 102nd Annual Meeting. Washington DC: Transportation Research Board.

2. Terranova, P. & Perez, M.A. (2023). *Developing a motorcycle injury risk model for planar collisions: Insights from the motorcycle crash causation study.* Paper presented at the 2023 Association for the Advancement of Automotive Medicine Annual Meeting. Indianapolis, IN: Association for the Advancement of Automotive Medicine.

3. Valente, J., Jain, S., Amin, A., & Perez, M.A. (2023). *Evaluation of the effectiveness of non-contact respiration rate detection for post-crash care application.* Paper presented at the 2023 Association for the Advancement of Automotive Medicine Annual Meeting. Indianapolis, IN: Association for the Advancement of Automotive Medicine.

4. Song, M., Ayoub, J., Tian, D., Perez, M.A., McClafferty, J., & Pari, E.M. (2023). *May I, please? Examining the need for improved intention communication on the road using naturalistic data.* Paper presented at the 67th International Annual Meeting of the Human Factors and Ergonomics Society. Washington, DC: Human Factors and Ergonomics Society.

5. Chavez, J & Perez, M.A. (2023). *Motor vehicle traffic fatalities by race and ethnicity (2010 – 2019).* Paper presented at the Proceedings of the Transportation Research Board 102nd Annual Meeting. Washington DC: Transportation Research Board.

6. Valente, J.T. & Perez, M.A (2022). *National Emergency Medical Services Information System (NEMSIS) delay analysis.* Paper presented at the Association for the Advancement of Automotive Medicine Annual Meeting – Student Symposium. Portland OR: Association for the Advancement of Automotive Medicine.

7. Britten, N. and Perez, M.A. (2022). *On-road assessment of driver mode awareness of assisted and automated driving.* Paper presented at the 66th International Annual Meeting of the Human Factors and Ergonomics Society. Atlanta GA: Human Factors and Ergonomics Society.

8. Valente, J. & Perez, M.A. (2020). *Emergency response to vehicle collisions: feedback from emergency medical service providers*. Virtual: 2020 Association for the Advancement of Automotive Medicine Conference – Student Symposium.

9. Noble, A., Lu, D., Basantis, A., Guo, F., Klauer, S., & Perez, M.A. (2018). *Characterization of conventional cruise control engagement using naturalistic driving data*. [Poster] Blacksburg, VA: 7th International Symposium on Naturalistic Driving Research.

10. Liu, S., Perez, M.A., & Lau, N. (2018). *Sleep and driving habits associated with sleep disorders – findings from SHRP 2 naturalistic diving study* (Paper No. 18-00985). Paper presented at the Proceedings of the Transportation Research Board 97th Annual Meeting. Washington, DC: Transportation Research Board.

11. Owens, J. M., Dingus, T. A., Guo, F., Fang, Y., Perez, M., McClafferty, J., & Tefft, B. (2018). *Estimating the prevalence and crash risk of drowsy driving using data from a large-scale naturalistic driving study* (Paper No. 18-04410) [Extended Abstract]. Washington, DC: Transportation Research Board.

12. Owens, J. M., Tefft, B., Guo, F., Fang, Y., Perez, M., McClafferty, J,. & Dingus, T. A. (2018). *Crash risk of cell phone use while driving: case-crossover study of SHRP 2 Naturalistic Driving Data* (Paper No. 18-03148) [Extended Abstract]. Washington, DC: Transportation Research Board.

13. McClafferty, J., Hankey, J. M., & Perez, M. A. (2016, August 30-31). *Quality control considerations in naturalistic driving data reduction efforts*. Paper presented at the Fifth International Symposium on Naturalistic Driving Research, Blacksburg, VA.

14. Kondoh, T., McLaughlin, S., Yamamura, T., Kuge, N., Perez, M.A., & Sunda, T. (2015, September 9-11). *Detailed investigation of real-time steering entropy sensitivity in calling events*. Paper presented at the Third International Symposium on Future Active Safety Technology Toward Zero Traffic Accidents, Gothenburg, Sweden.

15. Fitch, G. M., Hanowski, R. J., & Perez, M. A. (2014, August 25-28). *Driver's visual behavior when using handheld and hands-free cell phones.* Paper presented at the Fourth International Symposium on Naturalistic Driving Research, Blacksburg, VA.

16. Kondoh, T., Yamamura, T., Kuge, N., Perez, M. A., & Sunda, T. (2014). *Development of a real-time steering entropy method for quantifying driver's concentration level*. Paper presented at the Annual Meeting of the Japan Society of Automotive Engineering, Yokohama, Japan.

17. Fitch, G. M., Grove, K., Hanowski, R., & Perez, M. A. (2014). *Using naturalistic driving data to investigate light vehicle and commercial motor vehicle driver compensatory behavior while conversing on a cell phone*. Paper presented at the Proceedings of the Transportation Research Board 93rd Annual Meeting.

18. Perez, M. A., Viita, D., Hankey, J. M., Voran-Nowak, S., & Tengler, S. C. (2011). *On-Road evaluation of destination entry and wayfinding tasks: Comparisons against normal driving.* Proceedings of the Sixth International Driving Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design, Olympic Valley - Lake Tahoe, California.

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21. Perez, M.A., Viita, D., Hankey, J.M., Voran-Nowak, S., & Tengler, S.C., (2011). *Voice- and visual-manual-control navigation system evaluation based on user performance in destination entry and navigation tasks.* Paper presented at the Proceedings of the Transportation Research Board 90th Annual Meeting.

22. Perez, M. A., Doerzaph, Z. R., Gaylord, C.K., and Hankey, J. M. (2010). Extracting information from continuous naturalistic driving data: Sample applications. Proceedings of the 2010 IEEE Intelligent Vehicles Symposium. University of California, San Diego, CA, 1201-1208.

23. Perez, M. A., Neale, V. L., and Kiefer, R. J. (2009). *Test and evaluation of the Cooperative Intersection Collision Avoidance System for Violations (CICAS-V) Driver-Vehicle Interface - Paper No. 09-0461*. Paper presented at the 21st International Technical Conference on the Enhanced Safety of Vehicles Stuttgart, Germany.

24. Perez, M. A., Kiefer, R. J., Haskins, A., & Hankey, J. M. (2009). *Evaluation of forward collision warning system visual alert candidates and SAE J2400* (Paper No. 2009-01-0547). Paper presented at the 2009 Society of Automotive Engineers World Congress.

25. Perez, M. A., Doerzaph, Z. R., and Neale, V. L. (2007). *Empirical evaluation of diverse threat assessment algorithms for Intersection Collision Warning*. Proceedings of the Transportation Research Board Annual Meeting, Washington, D.C.

26. Perez, M. A. and Nussbaum, M. A. (2005). *Prediction of 2-D lift motions using artificial neural networks: An evolutionary approach*. Proceedings of the 49th Annual Meeting of the Human Factors and Ergonomics Society, Orlando, FL.

27. Lee, S.E., Brown, S., Perez, M., Doerzaph, Z., and Neale, V.L. (2005). *Normal and hard braking behavior at stop signs and traffic signals*. Proceedings of the 49th Annual Meeting of the Human Factors and Ergonomics Society, Orlando, FL.

28. Brown, S.B., Lee, S.E., Perez, M.A., Doerzaph, Z.R., and Neale, V.L. (2005). Effects of haptic brake pulse warnings on driver behavior during an intersection approach. Proceedings of the 49th Annual Meeting of the Human Factors and Ergonomics Society, Orlando, FL.

29. Perez, M. A., Doerzaph, Z. R., and Neale, V. L. (2004). Driver deceleration and response time when approaching an intersection: Implications for intersection violation warning. Proceedings of the 48th Annual Meeting of the Human Factors and Ergonomics Society, New Orleans, LA.

30. Doerzaph, Z. R., M. A. Perez, et al. (2004). Approach profiles for distracted, non-distracted, and willfully violating drivers: implications for an intersection decision support system. Proceedings of the ITS Safety and Security Conference, Miami, FL.

31. Perez, M. A., and Nussbaum, M. A. (2003). Exploratory surface electromyography analysis using principal components analysis. Proceedings of the 2003 Meeting of the American Society of Biomechanics, Toledo, OH.

32. Hanowski, R. J., Perez, M. A., and Cross, B. S. (2003). Evaluation of a nighttime directional guidance system for heavy vehicles. Proceedings of the ITS America's 13th Annual Meeting, Minneapolis, MN.

33. Perez, M. A., and Nussbaum, M. A. (2002). Application of Principal Components Analysis for Evaluation and Classification of Complex EMG Data. Proceedings of the Human Factors and Ergonomics Society 46th Annual Meeting, Baltimore, MD. 1147-1151[1]

34. Perez, M. A., and Nussbaum, M. A. (2001). Performance of an artificial neural network model in the prediction of lower torso muscle recruitment patterns. Proceedings of the Human Factors and Ergonomics Society 45th Annual Meeting, Minneapolis, MN. 1011-1015.

35. Perez, M. A., and Nussbaum, M. A. (2000). Empirical evaluation of models used to predict torso muscle forces. Ergonomics for the New Millennium. Proceedings of the IEA 2000/ HFES 2000 Congress, San Diego, CA. 620-623.

CONFERENCE PROCEEDINGS (NON-REFEREED)

1. Chavez Orellana, J. & Perez, M.A. (2024). *Measuring the effectiveness of rearview cameras in 2020 New Jersey backing crashes* [Poster] Presented at the 2024 Safe Mobility Conference, Chapel Hill, NC.

2. Werner, A. & Perez, M.A. (2024). *Identifying queer and disability-related safe mobility disparities among older adults* [Poster] Presented at the 2024 Safe Mobility Conference, Chapel Hill, NC.

3. Werner, A. & Perez, M.A. (2024). *Towards older adult-inclusive mobilityscapes: LGBTQ+ and mobility aid use impacts.* [Poster] Presented at the 103rd Annual Meeting of the Transportation Research Board, Washington, DC.

4. Britten, N. & Perez, M.A. (2024). *Method for estimating remote operator workload for automated vehicles.* [Poster] Presented at the 103rd Annual Meeting of the Transportation Research Board, Washington, DC.

5. Valente, J. & Perez, M.A. (2023). *National Emergency Medical Services Information System (NEMSIS) delay analysis.* [Poster] Presented at the 102nd Annual Meeting of the Transportation Research Board, Washington, DC.

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[1] Received the Industrial Ergonomics Technical Group award for Best Student Paper

6. Amin, A., Valente, J., & Perez, M.A. (2022). *Implementation of a real-time occupant injury triage system in motor vehicles: Respiration measurement.* [Poster] Presented at the 2022 Virginia Tech Annual Summer Research Symposium, Blacksburg, VA.

7. Valente, J. T. & Perez, M. A. (2022). *Investigation into the NEMSIS database and emergency response event delays*. 2022 Virginia Highway Safety Summit, Alexandria, VA.

8. Perez, M.A. & Lipka, M. (2022). *Estimating crash consequences for occupantless automated vehicles.* Presented at the Society of Automotive Engineers Government/Industry Meeting, Washington, DC.

9. Britten, N. & Perez, M.A. (2022). *An on-road assessment of driver secondary task engagement and performance during assisted & automated driving.* [Poster] Presented at the 101st Annual Meeting of the Transportation Research Board, Washington, DC.

10. Valente, J. & Perez, M.A. (2022). *Improving emergency response to motor vehicle collisions.* [Poster] Presented at the 101st Annual Meeting of the Transportation Research Board, Washington, DC.

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102. Sudweeks, J., Kady, J., Perez, M. A., Hutton, J. (2014). *MRI Global S08 Phase 2 Left Turn Data* [Data set]. doi:10.15787/VTT1KW29

103. Sudweeks, J., Sarkar, A., McClafferty, J., Perez, M., and Hankey, J. (2014). *Mask Head Pose Validation Study Dataset (Clipped)* [Data set]. doi:10.15787/VTT1QP47.

104. Dingus, T. A., Guo, F., Perez, M. A. (2015). *Replication Data for: Driver crash risk factors and prevalence evaluation using naturalistic driving data* [Data set]. doi:10.15787/VTT1VC7C

105. Lei, L., Witcher, C., Kady, J., Perez, M.A., Bolme, D., and Karnowski, T.P.. (embargoed until 2017). *Automated Feature Extraction Data Sets: Event Record and Seatbelt Usage Data* [Data set]. doi:10.15787/VTT13W20

106. Perez, M. A., McGeehee, D., Carney, C., Reyes, M., Hallmark, S., Oneyear, N. (2014). *Iowa State University CTRE S08: Analysis of the SHRP2 Naturalistic Driving Study Data S08-D; Assessing Lane Departures on Rural Two-Lane Curves* [Data set]. doi:10.15787/VTT1PP4V

INVITED AND ORGANIZED PRESENTATIONS

1. Invited speaker for the Southwest Virginia Chapter of the Military Officers Association of America monthly meeting. My talk was titled: "Safety Research at the Virginia Tech Transportation Institute". April 18, 2024, Salem, VA.
2. Invited speaker for the Virginia Tech Chapter of the Human Factors and Ergonomics Society. My talk was titled: "Professional Certification in Human Factors and Ergonomics". April 10, 2024, Blacksburg, VA.
3. Invited panelist in the *Comparing Apples to Apples: Finding Agreement on Comparing the Crash Record of Automated Driving Systems and Human Drivers* session within the 103rd Annual Meeting of the Transportation Research Board. Presentation Title: Automated Vehicle Crash Rate Comparison using Naturalistic Data. Organizer: Transportation Research Board. January 8, 2024, Washington, DC.
4. Invited panelist in the *Transportation Centers of Excellence* session within the Executive Networking Conference. Organizer: National Institute of Minority Economic Development. August 7, 2023, Pinehurst, NC.
5. Organizer and Moderator of the *Preparing for your Prelim: What you should Know!* panel, featuring Virginia Tech Ph.D. candidates Kinsley Tate, Luke Riexinger, Emily Kieffer, Katrina Colucci-Chang, Grace Wusk, Caleb Stine, Kedar Vaidya, Alyssa Huntington, and Samantha Haus, Virtual, April 19, 2021.
6. Panelist in the *International S&CC Research in Japan and the ASEAN region* panel, within the 2021 Smart & Connected Communities Principal Investigators' Meeting, Virtual, April 8, 2021.
7. Organizer and Moderator. *Careers after Graduate School as a Biomedical Engineer*. Panel featuring Drs. Cherice Hill (Medical University of South Carolina), Nishant Moran (PhotoniCare), Brittany Taylor (University of Florida), William Vogt (Biomedical Engineer), and Beatriz Paniagua (Kitware): October 28, 2020, Virtual.
8. **Technical Session Moderator.** *Choices and Challenges Forum – Self-driving Cars in the New River Valley*. The Inn at Virginia Tech: April 4, 2019, Blacksburg, VA.
9. *SAFE-D – VTTI's National UTC* (Session). 2nd Annual Symposium of the Center for Advanced Transportation Mobility: November 5, 2018, Blacksburg, VA.
10. *Biomedical Engineering at Virginia Tech: Human Factors in Transportation* (Seminar). Polytechnic University of Puerto Rico: October 22, 2018, San Juan, Puerto Rico; University of Puerto Rico – Mayaguez campus: October 23, 2018, Mayaguez, Puerto Rico.

11. **Keynote Address**. *Digital Signal Processing in Action: Naturalistic Driving Research*. DSP in Vehicles: October 8, 2018, Nagoya, Japan.
12. *Power vs. Responsibility: Naturalistic Driving Data Use Cases* (Topic-Contributed Session - Privacy Protections for Transportation Data in the Big Data Environment). Joint Statistical Meeting: August 2, 2018, Vancouver, BC, Canada.
13. *Naturalistic Driving Data – Acquisition and Application* (Seminar, Sigma Xi – General Motors Corporation R&D Chapter). GM Technical Center R&D Auditorium: May 10, 2018, Warren, MI.
14. *Human Factors and Ergonomics Research at the Virginia Tech Transportation Institute* (Seminar, HFES Penn State Student Chapter). Leonhard Building: September 29, 2016, State College, PA.

15. *SHRP 2 NDS: Database Content, Access, Analyses* (2016 Pennsylvania State Police Crash Reconstruction Seminar). Ramada Inn: September 28, 2016, State College, PA.

16. *Naturalistic Driving: Definitions, Datasets, and Findings* (2016 I.DRR & V*Star User Forum). Hilton Harbor Island: February 21, 2016, San Diego, CA.

17. **Keynote Speaker.** *Hispanic Americans: Energizing Our Nation's Diversity* (National Transportation Safety Board 2015 Hispanic Heritage Month Celebration). National Transportation Safety Board: October 13, 2015, Washington, DC.

18. *Naturalistic Driving Data: Collection, Processing, and Application* (ITS America Safety Forum) Webinar: March 26, 2015.

19. **Workshop Moderator**. *SHRP 2 InDepth* (Fourth International Symposium on Naturalistic Driving Research) The Inn at Virginia Tech: August 28, 2014, Blacksburg, VA.

20. **Workshop Contributor**. *SHRP 2 InSight* (Fourth International Symposium on Naturalistic Driving Research) The Inn at Virginia Tech: August 25, 2014, Blacksburg, VA.

21. **Training Organizer.** *SHRP 2 Safety Database Training.* Two-course sequence lasting ten days, delivered in Arlington, VA (7 days) and Blacksburg, VA (3 days), 7/28/2014 – 8/14/2014 and 9/8/2014-9/25/2014.

22. **Workshop Contributor**. *Introduction to the Insight SHRP2 NDS Website* (93rd Annual Meeting of the Transportation Research Board) Keck Center: January 12, 2014, Washington, D.C.

23. **Workshop Contributor**. *Introduction to the Insight SHRP2 NDS Website* (SHRP2 Safety Symposium - 2013) Keck Center: July 12, 2013, Washington, D.C.

24. **Workshop Contributor.** *Role of Naturalistic Driving In Understanding Crash Risk and Driver Behavior* Turner Fairbank Highway Research Center: October 3, 2012, McLean, VA.

25. **Workshop Moderator**. *Introduction to the SHRP 2 NDS Dataset* (Third International Symposium on Naturalistic Driving Research) The Inn at Virginia Tech: August 30, 2012, Blacksburg, VA.

26. *Identifying cognitive load from naturalistic data* (presented as part of the Third International Symposium on Naturalistic Driving Research) The Inn at Virginia Tech: August 29, 2012, Blacksburg, VA.

27. **Workshop Moderator**. *Working in the Data Mines: The SHRP 2 NDS Dataset* (Human Factors Workshop 144C at the TRB Annual Meeting) Marriott Wardman Park: January 22, 2012, Washington, DC.

28. *Ford Fellowship – Predoctoral Sciences, Math & Engineering Workshop: Maximizing your Predoctoral Award* (presented as part of the 2011 Conference of Ford Fellows). The Beckman Center of the National Academies: October 15, 2011, Irvine, CA.

29. *Using technology to prevent and reduce distraction* (presented as part of the 2011 Institute of Transportation Engineers 2011 Technical Conference and Exhibition). The Swan Resort: April 4, 2011, Lake Buena Vista, FL.

30. *Video Reduction and Operational Definitions* (presented as part of TRB Human Factors Workshop: Maneuvering through Naturalistic Driving Data; TRB Annual Meeting) Marriott Wardman Park: January 11, 2009, Washington, DC.

31. *Naturalistic Data Integration with Other Research Methods: Advanced Collision Avoidance Systems Project (ACAT) – Backing Maneuvers* (presented as part of TRB Human Factors Workshop: Maneuvering through Naturalistic Driving Data; TRB Annual Meeting) Marriott Wardman Park: January 11, 2009, Washington, DC.

32. *Driver Usage Patterns for Secondary Information Systems* (presented as part of the First Human Factors Symposium on Naturalistic Driving Methods & Analyses). The Inn at Virginia Tech: August 27, 2008, Blacksburg, VA.

33. *Naturalistic Driving: Crash and Near Crash Surrogate Distraction Metrics* (presented as part of the 2008 Driver Metrics Workshop) The Westin Riverwalk: June 2, 2008, San Antonio, TX.

34. *Light Vehicle Safety Research at VTTI* (presented as part of the 2008 Operation C.A.R.E Annual Meeting) Williamsburg Lodge Conference Center: May 20, 2008, Williamsburg, VA.

35. *Ford Fellowship – Pre-doctoral & Dissertation Workshop for fellows in Science and Engineering* (presented as part of the 2007 Conference of Ford Fellows) Arnold and Mabel Beckman Center: October 6, 2007, Irvine, CA.

36. *Intersection research at VTTI* (presented as part of the 2006 Virginia Section of the Institute of Transportation Engineers Spring Meeting) Hotel Roanoke and Conference Center: March 23, 2006, Roanoke, VA.

37. *Information overload? The past, present, and future of in-vehicle information technologies.* (Presented as part of the Spring 2003 Computer Science Seminar Series) Computer Science Department, Virginia Tech: March 12, 2003, Blacksburg, VA.

MEDIA

Driver safety important topic for continuing research. Virginia Tech News, Clark Dehart, 7/18/2023. *Link.*

Summer research program invites students to experience 'golden days as your genuine self.' Virginia Tech News, Kelly Izlar, 7/6/2023. *Link.*

Simulating self-driving security. VTx Newsletter, Kelly Izlar, 1/18/2023. *Link.*

Transportation award for a first-generation Hokie could improve medical response training for vehicle collisions and save lives. *VTx Newsletter*, Laura McWhinney, 1/28/2022. *Link*

Virginia Tech Transportation Institute research students accepted into the Dwight Eisenhower Transportation Fellowship Program. *VTx Newsletter*, Jacob Levin, 1/10/2022. *Link*

Research shows rotator cuff surgery patients can return to driving faster after procedure. WDBJ7 News, Roanoke, VA and WWBT News, Richmond, VA, 3/22/2022. Correspondent: Ashley Boles.

Rotator cuff surgery driving research. YouTube, 12/10/2021. Link.

DC-area drivers with advanced-tech cars sought for paid study. WTOP (Washington, DC metro area station), interviewed by Dick Uliano 2/8/2012.

iTHRIV announce pilot funding for health research projects. CBS19 News, unattributed. 2/26/2020.

iTHRIV funding research into depression, rotator cuffs, cancer. Augusta Free Press. 2/26/2020.

Institute backs medical research projects. The Roanoke Times, written by Luanne Rife, 2/26/2020.

Organization's grants to fund four health care projects. The Daily Progress, unattributed. 2/25/2020.

New iTHRIV projects approved, LG expands to Floyd. The Roanoker, written by Dan Smith. 2/25/2020.

VA Tech, UVA, Carilion and Inova announce statewide health research projects. The Roanoke Star. 2/25/2020.

Virginia Tech study finds emotion spikes risk of car accidents. WFXR (Virginia First), Roanoke, VA. Correspondent: Taylor Kanost. 2/24/2016. http://www.virginiafirst.com/news/local-news/virginia-tech-study-finds-emotion-spikes-risk-of-car-accidents

Virginia Tech lab researches driver-car interaction. The Roanoke Times, written by Jacob Demmitt, 8/2/2014

Telematics Update. Interviewed by David McNamara 2/8/2012.

Future crash avoidance technologies. ABC World News, 4/5/2007, Correspondent: Lisa Starks

Future vehicle safety research. WDBJ7 News (CBS Affiliate, Roanoke, VA), 5/23/2007, Justin McLeod