

## KIRSTEN WHITE



### **Specialized Professional Competence**

Biomechanics including analysis of human injury mechanism, causation, and tolerance. Kinematics and kinetics of human movement. Accident reconstruction including motor vehicle, recreational equipment, and industrial equipment. Computer simulation and analysis of vehicle and human dynamics. Static and dynamic experimental test design, data acquisition and analysis. Medical products testing and analysis. Automobile and heavy vehicle event data recorder imaging and analysis. Whole body vibration analysis.

### **Background and Professional Honors**

B.E. (Hons) (Mechanical Engineering), Adelaide University  
M.S. (Biomechanical Engineering), Stanford University

Principal,  
Talas Engineering, Inc.  
Managing Engineer,  
Piziali and Associates, Inc.  
Research Officer,  
Road Accident Research Unit, Adelaide University  
Internship,  
Australian Submarine Corporation

Registered Professional Mechanical Engineer, California, #M35194

Certified Crash Data Retrieval System Technician  
Certified XL Tribometrist

### **Professional Activities & Memberships**

Reviewer, Society of Automotive Engineers International Journal of Transportation Safety  
Reviewer, Society of Automotive Engineers Technical Papers  
Technical Committee F-24 on Amusement Rides and Devices, American Society for Testing and Materials  
Member, Society of Automotive Engineers  
Member, American Society of Mechanical Engineers  
Member, American Society for Testing and Materials  
Member, American Association for the Advancement of Science

## **Awards**

Stanford Graduate Fellowship

Top Student in Mechanical Engineering, Adelaide University

IEE Prizes, Most Outstanding Female Engineering Student, Adelaide University

IEE Prizes, Manufacturing Prize, Adelaide University

Australian Submarine Corporation Scholarship

## **Selected Publications and Presentations**

“A Method for Lens Distortion Correction of Algorithmically Altered Images,” SAE Technical Paper 2025-01-8680, SAE International 2025 World Congress, Detroit, Michigan, April 2025 (with K. Pittman, E. Mockensturm, and T. Buckman).

“Characterization of Janus V3 After Market Vehicle Camera with Global Positioning and 3-Axis Accelerometer,” SAE Technical Paper 2017-01-1420, SAE International 2017 World Congress, Detroit, Michigan, April 2017 (with R. Merala).

“Whole-Body Vibration on Recreational Vehicles: Comparison with Occupational Exposure,” 7th World Congress of Biomechanics, Boston, MA, July 2014 (with E. Serina).

“Lumbar Loads while Operating Vehicles in an Industrial Environment,” 7th World Congress of Biomechanics, Boston, MA, July 2014 (with E. Serina, C.Y. Chang, and D.M. Desautels).

“The Effect of Speed on the Dominant Axis of Whole-Body Vibration on Locomotives,” 4th American Conference on Human Vibration, Hartford, CT, June 2012 (with E. Serina).

“Rollout Deceleration of Modern Passenger Vehicles,” SAE Technical Paper 2012-01-0616, SAE International 2012 World Congress, Detroit, Michigan, April 2012 (with R. Merala, D. Desautels, and T. Ellis-Caleo).

“Impact forces when stepping off moving railroad equipment,” Annual Meeting of the American Society of Biomechanics, Long Beach, CA, August 2011 (with E. Serina).

“Tractor Semitrailer Left Turns and Lane Changes,” SAE Technical Paper 2010-01-0049, SAE International 2010 World Congress, Detroit, Michigan, April 2010 (with R. Merala).

“Driver Perception of a Loose Left Rear Wheel,” SAE Technical Paper 2010-01-0050, SAE International 2010 World Congress, Detroit, Michigan, April 2010 (with R. Merala and D. Desautels).

“Occupant kinematics in locomotive low-speed impacts,” Annual Meeting of the American Society of Biomechanics, Penn State University, August 2009 (with E.R Serina, F.J. Peterson, and D. Desautels).

“The development of a protective headband for car occupants,” Australian Transport Safety Bureau, Canberra, 2000 (with R.W.G. Anderson and A.J. McLean).

“The pedestrian friendliness of popular cars sold in Australia : a report on the results of preliminary subsystem tests,” Department of Transport and Regional Services, Canberra, Australia, 2000 (with R.W.G. Anderson, L.D. Streeter, A.J. McLean and M. Van de Griend).