Patrick Dean Foltz

Curriculum Vitae

Center for Applied Biomechanics
University of Virginia
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Education

Masters of Engineering, Department of Mechanical and Aerospace Engineering
School of Engineering and Applied Science, University of Virginia – May 2012

Bachelor of Science, Department of Physics
Bridgewater College – Cum Laude, May 2009

Work Experience

University of Virginia, Center for Applied Biomechanics — June 2013-Present
Mechanical Engineering Technician

University of Virginia, Center for Applied Biomechanics — May 2012-June2013
Research Assistant

University of Virginia, Center for Applied Biomechanics — May 2010-May 2012
Graduate Research Assistant

Projects

- NHTSA Rollover
- Honda Rollover
- HATCI Rollover
- Honda Side Impact
- Toyota Rollover

Honors

- Chi Alpha Sigma – National Collegiate Athletic Honor Society

Research Interests and Activities

- Parametric Evaluation and Design of the Rollover Test Buck
- Crashworthiness and occupant kinematics analysis of rollover crashes for OEM sponsers
- Design and maintenance of the CAB's testing systems, including the VIA and SESA sleds, as well as the DRoTS system
- Management of all rollover testing series
- Involved in data and image collection during rollover testing

Associations/Registrations

- Philomathes Society- Bridgewater College Honor Society

Leadership Positions

- Lead vehicle prep testing technician
- Lead test engineer and systems operator for rollover testing
- Systems operator for Honda Side Impact testing
- Management of Grad Students directly under PI for all rollover testing

Special Skills

- Proficient in DTS Slice and DTS Pro data analysis software, GXLink high speed imaging software, VIA sled control system
- Skilled in Solidworks, Microsoft Excel and other Office Applications, Minitab, R Statistical Software, FARO Scene, GeoMagics
- Experience in LS-Dyna, MATLAB, Entrée V5, SESA sled control system
- Knowledge of AutoCAD, Hypermesh
- Basic Understanding of the Spanish Language

Publications

A. Refereed Journal Publications

B. Refereed Conference Publications

C. Conference Publications

- Foltz, P, Kim, T, Kerrigan, JR, Crandall, JR. (2011) Vehicle greenhouse shape analysis for design of a parametric test buck for dynamic rollover testing. Paper Number 11-0271. Proceedings of the 22nd International Conference on the Enhanced Safety of Vehicles (ESV).

Invited Lectures