

Curriculum Vitae

Jason Young, B.E.Sc., M.A.Sc., P.Eng.

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PRACTICE AREAS

Collision Reconstruction

- Human Factors:
 - Perception Reaction Time
 - Nighttime Visibility
 - Road Design Assessment & Signage
 - Biomechanics
- Crash Data Recorder Analysis
- Pedestrian & Cyclist Collisions
- Rollover Collisions
- Winter Maintenance Assessment
- Tractor Trailer Collisions
- Snowmobile Collisions

Personal Injury Claims

- Human Factors:
 - Slips, Trips & Falls
 - Staircase & Building Code Assessment
 - Coefficient of Friction Testing
 - Signage & Warnings
 - Biomechanics
- Certified Playground Inspector
- Certified Zip Line & Challenge Course Level II Inspector
- Pools, Waterparks & Waterslides
- Wheelchair & Segway Falls
- Ladder Accidents

Product Failure Investigations

- Human Factors:
 - Product Warnings & Labels
 - Failure Analysis
 - Product Testing

ACADEMIC BACKGROUND

Masters Degree in Biomedical Engineering, University of Toronto, 1998

- Masters level courses in Human Factors, Dynamics, Physiology, Mechanics of Materials

Bachelors Degree in Mechanical Engineering, University of Western Ontario, 1996

- Undergraduate level courses in Physics, Dynamics, Mechanical Design, Biomechanics, Materials, Hemodynamics



EMPLOYMENT HISTORY

Advantage Forensics Inc., Toronto

President, April 2012 to present

Lead investigator on 600+ collision reconstruction, personal injury & product failure cases

Giffin Koerth Inc., Toronto

Forensic Investigator & Head of Personal Injury Assessment Team, July 2002 to April 2012

Lead investigator on 1200+ collision reconstruction, personal injury & product failure cases

Algood Casters Ltd., Toronto

Mechanical Engineer, January 1999 to June 2002

Conducted failure analysis & destructive testing, developed standards, designed injection molding & stamping dies

Centre for Studies in Aging, Toronto

Researcher, September 1996 to October 1998

Contributed to collision dynamics studies, wheelchair design, human factors studies & balance studies

Hand & Upper Limb Clinic, St. Joseph's Health Centre, London

Student Researcher, September 1995 to April 1996

Developed prototype strength tester, contributed to biomechanics studies

PROFESSIONAL SOCIETIES & ASSOCIATIONS

Professional Engineers Ontario, P.Eng. since 2002

Human Factors & Ergonomics Society (HFES), member since 2003

- Program Co-Chair, Forensics Professional Group, 2016-2018

Canadian Association for Technical Accident Investigators & Reconstructionists (CATAIR), member since 2002

Canadian Association of Road Safety Professionals (CARSP), member since 2009

American National Safety Institute (ANSI) B101.4 sub-committee since 2013

Canadian Playground Practitioners, member since 2017

American Society for Testing & Materials (ASTM), member since 2002:

- Committee E17: Vehicle-Pavement Systems
 - E17.23 Sub-committee: Tire-Pavement Slip Resistance
- Committee E30: Forensic Sciences
- Committee E58: Forensic Engineering
 - E58.02 Sub-committee: Product Defect Incidents
 - E58.03 Sub-committee: Vehicular Incidents
- Committee F08: Sports Equipment & Facilities
 - F08.12 Sub-committee: Gymnastics Equipment
 - F08.17 Sub-committee: Trampoline Equipment
 - F08.30 Sub-committee: Fitness Products
 - F08.51 Sub-committee: Biomechanics
 - F08.63 Sub-committee: Playground Surfacing Systems
- Committee F09: Tires
- Committee F13: Pedestrian Safety & Footwear
 - F13.10 Sub-committee: Traction
 - F13.30 Sub-committee: Footwear
 - F13.50 Sub-committee: Walkway Surfaces



- Committee F15: Consumer Products
 - F15.09 Sub-committee: Home Playground Equipment
 - F15.17 Sub-committee: Carriages, Strollers & Walkers
 - F15.22 Sub-committee: Toy Safety
 - F15.29 Sub-committee: Playground Equipment
 - F15.38 Sub-committee: Window Fall Prevention
 - F15.42 Sub-committee: Furniture Safety
 - F15.49 Sub-committee: Pool Safety Standards
 - F15.52 Sub-committee: Scooters
 - F15.58 Sub-committee: Powered Scooters & Skateboards
- Committee F24: Amusement Rides & Devices
 - F24.24 Sub-committee: Design & Manufacture
 - F24.30 Sub-committee: Maintenance & Inspection
 - F24.40 Sub-committee: Operations
 - F24.61 Sub-committee: Adventure Attractions
 - F24.70 Sub-committee: Water Related Amusement Rides
- Committee F27: Snow Skiing
 - F27.10 Sub-committee: Binding Test Procedures
 - F27.30 Sub-committee: Skis & Boots
- Committee F45: Driverless Automatic Guided Vehicles

COURT QUALIFICATION HISTORY

- Qualified by Superior Court of Ontario, Quebec, P.E.I., and California (18 occasions) as expert in:
 - Collision Reconstruction
 - Human Factors including Perception Reaction Time, Collision Avoidance & Signage
 - Road Design Assessment
 - Winter Maintenance Assessment
 - Slips, Trips & Falls
 - Biomechanics
 - Waterslide Assessment
 - Mechanical Engineering
- Qualified at Ontario arbitrations (4 occasions) as expert in:
 - Human Factors
 - Bicycle Collisions
 - Slips, Trips & Falls
 - Mechanical Engineering

ADDITIONAL COURSES & TRAINING

- “Childhood Road Traffic Injuries in Canada”, CARSP Webinar, Jan 2018
- U.S. Department of Defense/NIST/ASTM Military Footwear Standards Webinar, Jan 2018
- “RCMP Cannabis Impairment Evaluation” CARSP Webinar, Sept 2017
- Tire Forensics & Accident Reconstruction Seminar, CATAIR, Toronto Police College, June 2017
- Slips, Trips & Falls International Conference, Toronto Rehabilitation Institute, Toronto, June 2017
- Slip Resistance Reference Standards Workshop, ASTM, Toronto, June 2017
- Zip Line & Challenge Course Inspector Training Conference & Exams, ACCT, Harrisburg, Mar 2017
- Pennsylvania Amusement Ride Safety Conference, Harrisburg, Mar 2017
- Canadian Certified Playground Inspector Course, Theory & Practical Exams, CPSI, Edmonton, Feb 2017



- “Vision Zero Road Safety” Webinar, CARSP, Feb 2017
- HFES Annual Conferences, Oct 2017, Sept 2016, Oct 2013, Sept 2011 & Oct 2009
- WREX 2016 Collision Reconstruction Conference, Orlando, May 2016
- Collision Reconstruction Journal Review Series Seminars, Advantage Forensics, Toronto, Jan to Mar 2016
- “Extracting Commercial Vehicle EDR Black Box Recorders” Webinar, Origin & Cause, Feb 2016
- “Comsol Multiphysics Simulation” Webinar, Comsol, Jan 2016
- PC-Crash Essentials Training Courses: “Latest Features” & “Vehicle Control”, MEA Forensics, Nov 2015
- ASTM F45 Unmanned Vehicle Standards Committee Meetings, Sept 2017, Jan 2016 & July 2015
- ASTM F15 Toy Safety Committee Meetings, Feb 2016, Mar 2015, Jan 2015 & Sept 2012
- ASTM F13 Pedestrian Safety & Footwear Committee Meetings, June 2017 & June 2014
- ASTM F08 Trampoline, Sports Equipment & Sports Facilities Committee Meetings, May 2017 & May 2014
- ASTM F15 Playground & Consumer Products Committee Meetings, May 2017 & May 2014
- “The Art of Interviewing & Cognitive Statement Taking”, OIAA Conference, Toronto, February 2014
- “Biomechanics & Insurance Claims”, OIAA Conference, Toronto, February 2014
- “Barefoot Friction, Slip-Resistance & Footwear”, Biomechanical Tribology Research Consortium, NJ, Nov 2013
- “PC-Crash Expert Level Training Course: Rollovers”, MEA Forensics, September 2013
- Zip Line & Challenge Course Inspector Certification Course & Exams, ACCT, Baltimore, Aug 2013
- “PC-Crash Expert Level Training Course: Tractors & Trailers”, MEA Forensics, April 2013
- Sports Injury & Resort Liability Seminar Series, McCague Borlack, Toronto, June 2010 to March 2013
- “Minimum Maintenance Standards – 2013 Revisions” Webinar, Ontario Good Roads Association, March 2013
- Examining Hybrid Electric Vehicles Seminar, Advantage Forensics, December 2012
- “Safer Infant Sleep Products”, Australian Safe Communities Foundation Webinar, September 2012
- Commercial Vehicle Event Data Recorder Downloading Seminar, Giffin Koerth, January 2012
- “Driver Distraction”, SAE Webinar, July 2011
- “The Human Factors Expert in Forensic Investigation & Litigation” Webinar, HFES, June 2011
- Crash Data Retrieval System Technician Certification Course, Toronto, March 2010
- “Introductory Segway Training”, San Antonio, October 2009
- Canadian Multidisciplinary Road Safety Conference, CARSP, Saskatoon, June 2009
- “PC-Crash 8.1 Advanced Workshop”, MEA Training Course, Toronto, March 2009
- “Designing & Signalizing Turn Lanes for Safety” Webinar, Institute of Transportation Engineers, Nov 2008
- “Slip & Fall Prevention Research & Discussion”, Tile Council of America, July 2008
- “Practical Urban Maintenance”, C.S. Anderson Road School, University of Guelph, May 2008
- “Slip Resistance & Safety of Walking/Working Surfaces”, ASSE Webinar, June 2006
- “Advanced Driver Training”, BMW Training Course, Toronto, September 2005
- “Collision Reconstruction, Technology & Application”, CATAIR Conference, Burlington, August 2003
- “Estimating Driver Perception & Response Times”, CATAIR Training Course, Oshawa, December 2002
- Machine Shop Training Course, University of Western Ontario, London, 1994



LECTURES & TEACHING ENGAGEMENTS

- Expert panelist: “Nighttime Photography & Videography”, HFES Conference, Austin, Oct 2017
- Expert panelist: “Cross-Border Testifying”, HFES Conference, Austin, Oct 2017
- Expert panelist: “Barefoot friction research”, Slips, Trips & Falls International Conference, Toronto, June 2017
- Program developer: “Examining & Cross-Examining Experts”, The Advocates Society, 2010 to 2017
- Guest lecturer: “Falls & Biomechanics”, MSE431 Engineering Course, U of T, March 2017
- Guest lecturer: “Forensic Biomechanics”, MIE439 Engineering Course, U of T, Jan 2017
- Course instructor: “Crush Energy Analysis”, “Collision Biomechanics” & “Rollover Collision Reconstruction”, CATAIR, Moncton, June 2016
- Seminar presenter: “Collision Biomechanics & Injury Assessment”, WREX, Orlando, May 2016
- Seminar presenter: “Inspecting Vehicle Interiors for Injury Assessments”, WREX, Orlando, May 2016
- Guest lecturer: “Human Factors”, MIE345 Engineering Course, U of T, Mar 2017, Mar 2016 & Nov 2013
- Guest lecturer: “Biomechanics & Human Factors”, MIE240 Engineering Course, U of T, Mar 2016 & Jan 2013
- Seminar presenter: “Injury Risk vs. Delta-V for Drivers & Pedestrians”, Advantage Forensics, Feb 2016
- Seminar presenter: “PC-Crash Theory” & “Crush Energy Analysis”, Advantage Forensics, Jan 2016
- Seminar presenter: “Left-turn Accelerations at Intersections”, Advantage Forensics, Dec 2015
- Television feature story expert: “Pedestrian Collisions Increasing”, Global Evening News, Oct 2015
- Television feature story expert: “Nighttime Pedestrian Collisions”, CBC Metro Morning, Oct 2015
- Seminar presenter: “The New Minimum Maintenance Standards”, McKenzie Lake, London, Nov 2014
- Seminar presenter: “MVA Injury Biomechanics”, Grillone Bekiaris Law Firm, Mississauga, Oct 2014
- Expert panelist: “Emerging Sources of Electronic Evidence”, Ontario Bar Association, Toronto, June 2014
- Seminar presenter: “Nighttime Pedestrian Collisions”, Hughes Amys, Toronto, November 2013
- Seminar presenter: “Black Boxes: 2013 & Beyond”, CIIA Ontario, Grand Bend, June 2013
- Training instructor: “Segway Rider Introductory Training”, Advantage Forensics, Nov 2012
- Seminar presenter: “Accident Reconstruction & Human Factors”, Guzzo Law (2017), Bergel Magence (2012), Aviva Insurance (2007), TTC (2009)
- Seminar presenter: “Advanced Analysis of Slip, Trip & Fall Claims”, McKenzie Lake (2014), CIIA Ontario (2013), Black Sutherland (2013), Aviva (2012), Hughes Amys (2012), Beard Winter (2011), Travelers (2011), Kingsway (2002)
- Seminar presenter: “School Injury Claims”, Ontario School Board Insurance Exchange, Guelph, Dec 2011
- Course instructor: “Intersection Safety”, Ontario Traffic Council, Markham, Nov 2011 & Nov 2010
- Seminar presenter: “Human Factors in Pedestrian & Cyclist Collisions”, Aviva, Niagara Falls, Oct 2009
- Course instructor: “Practical Urban Maintenance”, C.S. Anderson Road School, May 2010 & May 2009
- Seminar presenter: “Nighttime Tractor Trailer Collisions”, Kingsway Insurance, Mississauga, Feb 2009
- Course instructor: “Accident Reconstruction & Personal Injuries”, The Canadian Institute, Toronto, Feb 2007
- Seminar presenter: “Property Claims & Risk Management”, Ontario Bar Association, Toronto, Jan 2006



JOURNAL PAPERS & PUBLICATIONS

- Technical paper reviewer for HFES Annual Conferences: 2009 to 2018
- Technical paper reviewer for CARSP Annual Conference: 2017 to 2018
- “Practical Tool for Ambient Illumination Comparisons at Dusk/Dawn”, Proceedings of 60th Annual HFES Conference, Sept 2016
- “Standardized Ambient Illumination Factor for Night Collisions”, WREX conference poster, May 2016
- “Collision Data Recorders: What Can Big Brother See?”, WP Magazine, April 2016
- “The Hitchhiker’s Guide to Having Your Hand Run Over”, HFES Newsletter, Vol. 32(1), Feb. 2016
- Contributor to:
 - ASTM F2774 “Practice for Manufacturing Quality Control of Consumer Trampoline Bed Material”
 - ASTM F2970 “Design, Manufacture, Installation, Operation, Maintenance & Inspection of Trampoline Courts”
 - ASTM WK48376 “Guide for Forensic Engineering Expert Reports”
 - ASTM WK48955 “Standard for Navigation for Driverless Automatic Guided Industrial Vehicles”
 - ASTM F381 “Standard for Components, Assembly, Use & Labeling of Consumer Trampolines”
 - ASTM F2374 “Standard for Design, Manufacture, Operation & Maintenance of Inflatable Amusement Devices”
 - ASTM F3101 “Standard for Unsupervised Public Use Outdoor Fitness Equipment”
 - ASTM F3105 “Standard for Externally Loaded Strength Training Equipment”
 - ANSI B101.4 draft: “Standard for Measuring the Wet Barefoot Condition of Floors”
 - ASTM F1679 “Standard for Using a Variable Incidence Tribometer”
 - ASTM F2508 “Standard for Validation, Calibration & Certification of Walkway Tribometers”
 - ANSI A-A-55617 & A-A-55619 “Medium & Heavy Duty Industrial Caster Standard”
 - ANSI/RESNA Wheelchair Standards Vol. 1 & 2
- “Practical Method for Forensic Testing of Fall Impact Effects on the Human Spine”, Proceedings of 57th Annual HFES Conference, Oct 2013
- “Nighttime Collisions – The Dilemma of the Invisible Pedestrian”, WP Magazine, June 2013
- “The Changing World of Collision Fraud Investigation”, WP Magazine, May 2013
- “The Slip Tester”, Claims Canada, Feb 2012
- “Painted Concrete Surfaces: Slippery or Not?”, Claims Canada National Claims Manual, Feb 2012
- “Foot Placement in Oblique Stair Descent”, Proceedings of the 55th Annual HFES Conference, Sept 2011
- “Visibility of Tractor Trailer Reflective Strips”, Proceedings of 53rd Annual HFES Conference, Oct 2009
- “Snowmobile Deceleration: Ejected Occupant Scenarios”, 19th CARSP Road Safety Conference, June 2009
- “What is a ‘Human Factors’ Expert Anyway?”, Claims Canada, April 2009
- “Road Design Issues in Motor Vehicle Collisions”, Without Prejudice, Dec 2008
- “Transportation Engineering: Forensic Engineering of Collisions”, Transportation Talk, CITE, Fall 2008
- “Validation of Dynamic Models for Power Wheelchairs using Working Model”, Masters Thesis, University of Toronto, Oct 1998, and published in RESNA Conference Proceedings, June 1998
- “Design of a Portable Elbow Torque Meter for Clinical Use”, Undergraduate Thesis, UWO, April 1996