CURRICULUM VITAE

Raffi Engeian, B.A.Sc., MBA, P.Eng.

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EXPERT SUMMARY

Mr. Raffi Engeian is Practice Lead of Special Investigations & Collision Reconstruction at 30 Forensic Engineering. He graduated from the University of Windsor with a Bachelor in Applied Science (Mechanical Engineering) and a Master of Business Administration. Raffi has focused on motor vehicle collision reconstruction since 2007 and received his Professional Engineer designation in 2009. He has been a forensic engineer in the Collision Reconstruction group at 30 since June of 2013. Raffi has investigated thousands of collisions involving automobiles, cyclists, pedestrians, off-road and commercial vehicles, and motorcycles. He has also investigated vehicle damage with respect to alleged collision circumstances. Raffi is qualified as an Expert Witness in Accident Reconstruction in arbitrations, the Ontario Court of Justice, and the Ontario Superior Court of Justice.

PROFESSIONAL CERTIFICATIONS

Vehicle Data Forensics and Digital Media Analysis:

- Certified Vehicle System Forensic Operator (CVSO), Berla iVe Vehicle System Forensics
    - Proficiency in the understanding of the vehicle forensic process, vehicle data fundamentals, and the iVe EcoSystem
- Certified Vehicle System Forensic Examiner (CVSE), Berla iVe Vehicle System Forensics
    - Proficiency in the analysis and understanding of vehicle data utilizing the iVe Software
- Certified Vehicle System Forensic Technician (CVST), Berla iVe Vehicle System Forensics
    - Proficiency in the acquisition of vehicle data utilizing the iVe Hardware Kit
- Certified Forensic Video Technician (CFVT), Law Enforcement & Emergency Services Video Association (LEVA)

SPECIALIZED PROFESSIONAL COMPETENCIES

Collision Reconstruction

- Collisions involving passenger and commercial vehicles, motorcycles, and recreational vehicles, cyclists, and pedestrians
- Low speed and suspected fraudulent collisions
- Vehicle examination

- Supplemental Restraint System deployment and seatbelt use assessment
- Event Data Recorder data retrieval and analysis
- Vehicle mechanical fitness and damage assessment
- Collision site examination
- Visibility assessment
- Collision simulation and animation
- Vehicle dynamics and collision testing/research
- Occupant kinematics assessment

Design and Development of Automotive Sub-assemblies:

- Design failure mode and effects analysis (DFMEA)
- Engineering drawing preparation and review
- Geometric Dimensioning and Tolerance (GD&T)
- Prototyping and Failure Testing
- Lean Methodology and Six Sigma Statistical Analysis

ACADEMIC BACKGROUND

Master of Business Administration, University of Windsor, Windsor, ON, 2004

Bachelor of Applied Science (Mech. Engineering), University of Windsor, Windsor, ON, 2002

ADDITIONAL COURSES AND TRAINING

- iVe Vehicle System Forensics Training Course, Berla Corporation, Barrie, ON, September 2025
- Photogrammetry 1: PhotoModeler and SynthEyes for Forensic Video Analysis, Law Enforcement & Emergency Services Video Association (LEVA), Online Training, December 2024
- LEVA Level 2: Forensic Video Analysis & the Law, Law Enforcement & Emergency Services Video Association (LEVA), Calgary Police Service Headquarters, Calgary, AB, October 2024
- LEVA Level 1: Forensic Video Analysis & the Law, Law Enforcement & Emergency Services Video Association (LEVA), University of New Haven (Orange Campus), Orange, CT, June 2023
- World Reconstruction Exposition, WREX, Orlando, FL, April 2023
- iVe Vehicle System Forensics Training Course, Berla Corporation, Annapolis, MD, August 2019
- 24-hour Crash Data Retrieval (CDR) Analysis and Applications Course for Engineers, Crash Data Specialists LLC, Toronto, ON, February 2019
- Passenger and Commercial Vehicle Tires Seminar, Bridgestone Americas Tire Operations, Toronto, June 2017
- Ontario Police College Crash Testing, Aylmer, ON, April 2017

- The Advocates' Society: Examining Experts, Toronto, ON, April 2017
- World Reconstruction Exposition, WREX, Orlando, FL, May 2016
- Reconstruction and Analysis of Motorcycle Crashes, Society of Automotive Engineers, Detroit, MI, April 2016
- The Advocates' Society: Examining Experts, Toronto, ON, February 2016
- The Advocates' Society: Examining Experts, Toronto, ON, May 2015
- ARC-CSI Crash Conference, Las Vegas, NV, June 2009, 2012, 2015
- Canadian Association of Technical Accident Investigators and Reconstructionists: Conference and Annual General Meeting, Ontario Police College, Aylmer, ON, August 2014
- Civil Litigation Skills Program: Examining and Cross-examining Experts, The Advocate's Society, Toronto, ON, May 2014
- Crash Data Retrieval System Analysis and Applications training, Toronto, ON, October 2013
- PC-Crash Expert: Rollovers, Tractors and Trailers, Online Training, September 2013
- Expert Witness Training, The Advocates' Society, Toronto, ON, May 2013
- PC-Crash Essentials Online Training, March 2013
- Human Factors Collision Analysis, Theory and Practice lecture, Mississauga, ON, January 2013
- Crash Data Retrieval System Analysis and Applications training, Toronto, ON, March 2011
- Winter Tires lecture, Bridgestone Canada, Toronto, ON, October 2010
- Crash Data Retrieval System Technical Certification course, Collision Safety Institute, Toronto, ON, March 2010
- Human Injury in Automobile Collisions lecture, Canadian Society of Medical Evaluators, Toronto, ON, April 3, 2009
- Data for Vehicle Dynamics Modelling lecture, University of Toronto, Toronto, ON, March 28, 2009
- Tire Testing and Modelling for Vehicle Dynamics lecture, Ryerson University, Toronto, ON, March 2009
- Tolerance Stack-Up course, Society of Automotive Engineers, Troy, MI, March 2006
- Injection Moulding Design Conference, DuPont, Mississauga, ON, November 2005
- Geometric Dimensioning and Tolerance course, St. Clair College, Windsor, ON, July 2005
- Six Sigma Green Belt Technical Training, Six Sigma Academy, Plymouth, MI, November 2004
- Failure Mode & Effects Analysis Certification, Global Quality Institute, Windsor, ON, October 2003
- Society of Automotive Engineers International Congress and Exposition, Detroit, MI, 2002 to present

PROFESSIONAL EXPERIENCE

30 Forensic Engineering

Practice Lead, Special Investigations & Collision Reconstruction
2022 – Present, Toronto, ON

- Conducting and managing technical investigations primarily involving motor vehicle collision reconstruction, vehicle mechanical fitness assessments and fraud investigations

Senior Associate, Collision Reconstruction
2013 – 2022

Kodsi Engineering Incorporated

Accident Reconstruction Consultant
2007 – 2013, Mississauga, ON

- Conducted and managed technical investigations primarily involving motor vehicle collision reconstruction, vehicle mechanical fitness assessments and fraud investigations

Schukra of North America

Systems/Project Engineer
2003 – 2006, Windsor, ON

- Developed customized lumbar systems for Tier 1 automotive interiors suppliers
- Worked directly under Directors of Program Management/Engineering and Director of North American Operations to learn and implement change in the Program Management Process

Ford Motor Company of Canada

MBA Cooperative Education Student Employee
2003, Windsor, ON

- Co-op student in Materials Logistics and Planning

Nemak of Canada

Engineering Cooperative Education Student Employee
2001, Windsor, ON

- Co-op student in Quality Assurance

Siemens Automotive

Engineering Cooperative Education Student Employee
2001, Windsor, ON

- Co-op student in Research and Development with a focus on Active Noise Control

PROFESSIONAL SOCIETIES AND ASSOCIATIONS

- Professional Engineers of Ontario (PEO), Member
- Society of Automotive Engineers (SAE), Member
- Association of Professional Engineers and Geoscientists of Alberta (APEGA), Member
- Canadian Association of Technical Accident Investigators and Reconstructionists (CATAIR), Member

PUBLICATIONS AND SPEAKING ENGAGEMENTS

- "TD Fraud Townhall - Collision Reconstruction Assessments of Suspected Fraudulent Claims," TD Insurance - Special Investigation Unit seminar, Toronto, ON, August 2024
- "Accident Reconstruction and Biomechanical Reports," TD Insurance webinar, Toronto, ON, May 2024
- "AI and Experts - Artificial Intelligence for Litigators: AI in Action," The Advocates Society webinar, Toronto, ON, April 2024
- "Collision Reconstruction: Introduction to Principles," Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, March 2024
- "Fraud Awareness Lunch and Learn: Collision Reconstruction Assessments of Suspected Fraudulent Claims," TD Insurance – Special Investigation Unit webinar, Toronto, ON, March 2024
- "Vehicle Image & Video Evidence," Co-operators Insurance webinar, Toronto, ON, November 2023
- "Collision Reconstruction Assessments of Suspected Fraudulent Claims," Co-operators Insurance seminar, Mississauga, ON, October 2023
- "OBA's Anatomy of a Trial: The New Essentials (Testimony of the Defence's Accident Reconstruction Engineer)," Ontario Bar Association, Toronto, ON, June 2023
- "Doing the Most Damage Part 2: Cross Examining an Expert - Demonstration - Examining and Cross-Examining Experts," The Advocates Society webinar, Toronto, ON, May 2023
- "Collision Reconstruction: Introduction to Principles," Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, March 2023
- "Collision Reconstruction Assessments of Suspected Fraudulent Claims," TD Insurance webinar, Toronto, ON, February 2023
- "Engineering Assessments of Suspected Fraudulent Motor Vehicle Collisions," IASIU San Diego, September 2022.
- "Collision Reconstruction Assessments of Suspected Fraudulent Claims," CASIU webinar, Toronto, ON, June 2022
- "30 Forensic Engineering Webinar: New Technologies for Assessing Vehicle Collision Claims," Toronto, ON, May 2022
- "Collision Reconstruction: Introduction to Principles," Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, March 2022
- "Assessments of Suspected Fraudulent Vehicle Claims," ICBC webinar, Toronto, ON, October 2021
- "The Nuances of Collision Reconstruction and Human Factors Assessments in MVAs Involving Motorcycles," Toronto, ON, May 2021

- "Collision Reconstruction: Introduction to Principles," Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, March 2021
- "Collision Reconstruction Assessments of Suspected Fraudulent Claims," Allianz-Assistance webinar, Toronto, ON, December 2020
- "30 Forensic Engineering Webinar: Collision Reconstruction Assessments of Suspected Fraudulent Claims," Toronto, ON, May 2020
- "30 Forensic Engineering Webinar: Suspected Fraudulent Claims," TD Insurance – Special Investigation Unit seminar, Toronto, ON, February 2020
- "Collision Reconstruction: Introduction to Principles", Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, February 2020
- "Biomechanics and Personal Injury Assessments", Co-Presenter, TD Insurance Staff Legal Annual Continuing Legal Education Seminar, Toronto, ON, June 2019
- "Collision Reconstruction: Introduction to Principles", Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, March 2019
- "Collision Reconstruction: Application of Principles," Guest Lecture, University of Toronto, Faculty of Applied Science and Engineering, Toronto, ON, May 2018
- "Identifying Red Flags from a Vehicle Damage & Injury Biomechanics," Commonwell Mutual Insurance Group, Lindsay, ON, November 2015
- "Identifying Red Flags from a Vehicle Damage Perspective," CASIU 15th Annual Fraud Forum, Thornhill, ON, September 2015
- "TD SIU Summit," Toronto, ON, June 2015
- Expert witness, "Cross-examination: Strategies for Success," Advocates Society, Toronto, ON, May 2015
- "Identifying Red Flags from a Vehicle Damage Perspective," The Dominion of Canada General Insurance Company, Travelers Insurance Company of Canada, Oakville, ON, May 2015
- "Issues in Collision Reconstruction and Biomechanics," East Collision Reporting Centre, Toronto, ON, March 2015
- R. Engeian, J. Leblanc, E. Christensen, S. Kodsi, "Accident Reconstruction: Seeking Certainty in an Uncertain World," Kodsi Engineering Inc., October 2012
- S. Kodsi, R. Engeian, K. Cassidy, J. Leblanc, "Just When You Thought It Was Safe to Turn…," Kodsi Engineering Inc., OIAA WP Magazine, April 2012S. Kodsi, R. Engeian, "The Current Stage for Staged Collisions," Kodsi Engineering Inc., OIAA WP Magazine, January 2009

COURT APPEARANCES

- Qualified as an Expert Witness in Collision Reconstruction in arbitrations (FSCO, ADR Chambers), the Ontario Court of Justice (Criminal Court), Ontario Superior Court of Justice, and Small Claims Court