

RICKY L. NGUYEN, M.S., P.E.



EDUCATION:

M.S. Engineering, Mechanical Engineering, University of Colorado Denver
B.S. Engineering, Mechanical Specialty, Minor in Economics, Colorado School of Mines, with High Scholastic Honors

REGISTRATION:

Registered Professional Engineer in the State of Colorado (P.E.), Registration No. 53261
Accredited Traffic Accident Reconstructionist (ACTAR), Registration No. 3046

EXPERIENCE:

Project Manager, Knott Laboratory, LLC January 2020 to present, Mechanical Engineer, Knott Laboratory, LLC, Centennial CO, April 2012 to December 2019
Completions Engineer, BP, Houston TX, August 2011 to April 2012
Engineering Intern, BP, Houston TX, Summer 2010
Engineering Intern, The Boeing Company, St. Louis MO, Summer 2009
Engineering Intern, United Launch Alliance, Littleton CO, Summer 2008

ACCIDENT RECONSTRUCTION:

Mr. Nguyen has performed investigations and reconstructions of high and low-speed motor vehicle accidents involving passenger cars, motorcycles, pedestrians, bicycles, and commercial vehicles. His experience includes the use of conservation of energy and conservation of momentum analysis to determine the speed of vehicles involved in accidents, crashworthiness of vehicles, occupant compartment intrusion, driver reaction, and time/space relationships and analysis. Mr. Nguyen's investigations often involve analysis of vehicle dynamics, vehicle safety, human factors and visibility studies. Frequent aspects of these investigations also involve the evaluation of the performance of brakes, tires, seat belts, and airbags. He also has working experience with engine, drivetrain and suspension failure analysis. Mr. Nguyen has also employed reconstruction techniques to analyze injury incidents and industrial accidents.

ACCIDENT RECONSTRUCTION TECHNOLOGIES:

Mr. Nguyen frequently utilizes the latest technologies available in accident reconstruction throughout all analysis stages, from gathering evidence through accident reconstruction and accident simulation. As a technician certified in Bosch crash data retrieval, Mr. Nguyen has retrieved and analyzed crash data from electronic data recorders in numerous passenger vehicles. In addition, Mr. Nguyen frequently surveys accident sites and vehicles using high definition 3-D laser scanning, total stations, and/or photogrammetry. After gathering survey data, Mr. Nguyen uses computer-aided drafting software packages to view the evidence and gather detailed measurements in virtual space. During the reconstruction process, Mr. Nguyen frequently develops and utilizes advanced computer scripts to solve complex and/or iterative calculations. After reconstructing an accident, Mr. Nguyen often simulates the accident using advanced crash simulation software, PC-Crash.

SAFETY ENGINEERING:

Mr. Nguyen has been involved in extensive investigation and analysis of the safety of mechanical products. Mr. Nguyen has applied the principles of safety engineering to the investigation of accidents in the areas of consumer products, window covering products, and material handling equipment such as stand-up and sit-down forklifts, racking systems, and warehouses. Mr. Nguyen has also been involved in liability investigation involving construction equipment such as cranes, aerial lifts, front loaders, motor graders, skid steers and various other pieces of equipment. Mr. Nguyen has also been involved in liability investigation involving heavy machinery, such as wood chippers and material bailing equipment. Frequent aspects of these investigations include maintenance, safety engineering, human factors, and incident reconstruction. Mr. Nguyen is fluent in the safety engineering aspects of CFR, FMVSS, ANSI, ASME, SAE, and other standards applicable in product cases.

PROFESSIONAL AFFILIATIONS:

Mr. Nguyen is a member of the following technical and professional societies:

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| SASE | - Society of Asian Scientists and Engineers | TBP | - Tau Beta Pi |
| SPE | - Society of Petroleum Engineers | ASME | - American Society of Mechanical Engineers |
| NSPE | - National Society of Professional Engineers | | |

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