



## Brett O'Toole

**MSBME, ACTAR**

### Senior Biomechanist

#### Department

Accident Reconstruction & Forensic Animation

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#### Locations

Phoenix, AZ

## Biography

Brett O'Toole is a Senior Biomechanist at YA Group with 12 years of experience, who has led or participated in over 1,000 accident and/or injury investigations. He applies his combined accident reconstruction and injury biomechanics experience to a wide range of incidents in both civil and criminal matters.

Among his many responsibilities are the investigation and documentation of accident sites in cases involving pedestrians, bicycles, motorcycles, heavy vehicles and other non-standard vehicles. Brett is also an FAA-licensed commercial drone pilot. For reliable expertise on your cases and claims, consult with Brett O'Toole today.

## Credentials

- MSBME | Master of Science - Biomedical Engineering
- ACTAR | ACTAR - 2945 - Accreditation Commission for Traffic Accident Reconstruction
- FAA Certified Drone Pilot

## Representative Consulting Assignments

- Vehicle Collision Analysis | Investigation and analysis of single and multi vehicle crashes involving passenger vehicle, motorcycle, bicycle, and heavy trucks
- Injury Potential Analysis | Biomechanical evaluation to determine human body motions and loading and how they compare to established injury tolerance thresholds
- Seatbelt Use Analysis | Determination of whether a seatbelt was being worn and how seatbelt use influenced injury outcomes
- Vehicle Electronic Data Download and Analysis | Retrieve input and response data to evaluate crash sequences
- Site Mapping and Visual Recreation | Use photography, drones, laser scanners, and hand measurements to document accident sites for accurate reconstruction and graphics

## Professional Experience

- 2023 - Current | Senior Forensic Biomechanist | YA Engineer Services
- 2017 - 2023 | Biomechanical Engineer - Vehicle Mechanical & Accident Reconstruction | Momentum Engineering Corp.
- 2011 - 2017 | Engineering Associate - Biomechanics Research & Consulting |

## Area of Practice

- Accident Reconstruction

- Biomechanics

## Education

- Arizona State University - Bachelor of Science - Biomedical Engineering - Tempe - Arizona
- Arizona State University - Master of Science - Biomedical Engineering - Tempe - Arizona
- Northwestern University, Center for Public Safety - Traffic Accident Reconstruction 1
- Northwestern University, Center for Public Safety - Traffic Accident Reconstruction 2
- Collision Safety Institute - Bosch Crash Data Retrieval (CDR) Analyst
- Collision Safety Institute - Bosch Crash Data Retrieval (CDR) Technician
- Lightpoint Scientific - Point Clouds in Collision Reconstruction: Speed from Video and Crush from Photos
- Institute of Police Technology and Management - Investigation of Pedestrian Collisions Video Course
- Introduction to PC-Crash - Los Angeles - California

## Affiliations

- Society of Automotive Engineers (SAE)
- Southwestern Association of Technical Accident Investigators (SATAI)