Exponent®
Engineering & Scientific Consulting

Michael Drzal

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Professional Profile

Mr. Drzal specializes in visual communication techniques including 3D visualization, animation, reverse camera projection / photogrammetry, and video analysis. He reconstructs 3-dimensional real world environments to support engineers and scientists in their analysis and depiction of accident events.

Mr. Drzal utilizes photogrammetry, video analysis, and laser scan data to create accurate, 3D models for use in general litigation and as court room demonstratives. He creates and animates dynamic 3D characters for the purpose of reconstructing biomechanical aspects of accident events. He is experienced in analytical illustration of human injury biomechanics, occupant kinematics, accident reconstruction, visibility factors, and incidents involving heavy equipment operation, trucking, forklift safety, sport, amusement activities, and slip/trip and falls.

Mr. Drzal is a specialist in Autodesk 3D Studio Max, Photomodeler, iNPUT-ACE, Adobe Creative Cloud, Faro Scene, Autodesk Recap, Geomagic, Agisoft Metashape and Osirix.

Mr. Drzal is a Law Enforcement and Emergency Services Video Association (LEVA) Certified Forensic Video Technician (CVFT).

Academic Credentials & Professional Honors

B.S., Digital Media, Drexel University, 2005

Exponent Excellence Awards: 2005, 2007, 2008, 2011, 2019, 2020

Licenses and Certifications

iNPUT-ACE Certified Operator

iNPUT-ACE Certified Examiner

LEVA Certified Forensic Video Technician (CFVT)

Autodesk Certified Professional: 3d Studio Max

Professional Affiliations

LEVA (Law Enforcement & Emergency Services Video Association) Associate Member: #3013

Nikon Professional Services Member: #Z130531717016

ACM SIGGRAPH Member: #2014062

Publications

Drzal M, Pasquesi S, Toney-Bolger M, Skiera J, Branigan, T. Now You See It: Utilizing Photogrammetry for Analysis and Visualizations. PLAC/Exponent Live, April 2022.

Drzal M, Wysocki E, Pittman K, Pasquesi S, Toney-Bolger M, Skiera J. Now You See It: Utilizing Photogrammetry for Analysis and Visualizations. Washington Defense Trial Lawyers, July 2021.

Drzal M, Wysocki E, Pittman K, Pasquesi S, Toney-Bolger M, Skiera J. Now You See It: Utilizing Photogrammetry for Analysis and Visualizations. Alabama Defense Lawyers Association, May 2021.

Presentations

Drzal M, Wysocki E, Pittman K, Pasquesi S, Toney-Bolger M, Skiera J. Now You See It: Utilizing Photogrammetry for Analysis and Visualizations. Exponent Live, Dec. 2020.

Drzal MJ. Inspection Photography 101. Human Factors Group, November 2016.

Drzal MJ. Seatbelt and Witness Mark Photography. Biomechanics Group, September 2016.

Drzal MJ. Inspection Photography 101. Atlanta Office, January 2016.

Drzal MJ. Photography 101. Exponent Atlanta Office, Atlanta, GA, September 2012.

Drzal MJ. Photography 101. Exponent Biomechanics Practice, Philadelphia, PA, March 2012.

DeRisi T, Drzal MJ. Photography 101. Exponent Thermal Practice, Natick, MA, March 2009.

Drzal MJ. Photography 101. Exponent Mentoring Circle, Natick, MA, September 2008.

Additional Education & Training

iNPUT-ACE Reverse Projection: Camera Match Overlay, October 2020.

LEVA (Law Enforcement & Emergency Services Video Association) Problem Solving Workflow, June 2020.

iNPUT-ACE Video Evidence Training Symposium, June 2020.

LEVA (Law Enforcement & Emergency Services Video Association) Workflow Analysis 201, May 2020.

LEVA (Law Enforcement & Emergency Services Video Association) Workflow Analysis 101, May 2020.

Phantom v-Series Camera Operator Training, 2013

Lightpoint Scientific: Point Clouds in Collision Reconstruction: Speed from Video and Crush from Photos, November, 2021.