



Résumé of  
**DAVID R. HESSEL, B.S**

**Kineticcorp™**

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**EXPERIENCE:**

Forensic Animator, Kineticcorp, LLC, Colorado 2005 to Present  
Forensic Animator Intern, Knott Laboratory, Inc., Colorado, 2004 to 2005  
Computer Animator, Millennium Gaming Inc., Colorado, 2002 to 2004

**EDUCATION:** Bachelor of Science, The Art Institute of Colorado, Media Arts and Animation, 1999 to 2002

**AWARDS:** Best Demo Reel, Art Institute of Colorado, 2002

**FORENSIC ENGINEERING AND VISUALIZATION:** Mr. Hessel has investigated and analyzed accidents specializing in the areas of computer simulation, animation, photogrammetry, video analysis, lighting, and visibility. During his undergraduate studies he also completed 2 years of education in engineering. Since 2002, Mr. Hessel has continued development in these areas, and gained additional experience in area of forensic engineering including investigating and reconstructing accidents involving pedestrians, bicycles, passenger cars, trains, airplanes, commercial vehicles, articulated truck and trailer combinations, vehicular accidents involving roadside barriers and terrain features, and industrial accidents. Mr. Hessel is proficient in 3d modeling and visualization software, including AutoCAD and 3D Studio Max

**RESEARCH:** In the course of his professional work, Mr. Hessel has conducted research in these areas:

- Visibility and vehicle illumination
- Photogrammetry, 3D visualization, and motion tracking
- Yaw marks and striations

**David R. Hessel, B.S**  
*Senior Forensic Animator*



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#### **Publications**

1. Neale, W.T.C., **Hessel, David**, Marr, James P., "Evaluation of Photometric Data Files for Use in Headlamp Light Distribution, Detroit, MI, 2010," Society of Automotive Engineers, Paper Number 2010-01-0292
2. Neale, W.T.C., **Hessel, David**, "Simulating Headlamp Illumination Using Photometric Light Clusters," Society of Automotive Engineers, Paper Number 2009-01-0110.
3. Rose, Nathan A., Neale, W.T.C., Fenton, S.J., **Hessel, David.**, McCoy, R.W., Chou, C.C., "A Method to Quantify Vehicle Dynamics and Deformation for Vehicle Rollover Tests Using Camera-Matching Video Analysis," 2008-01-0350, Society of Automotive Engineers, Warrendale, PA, 2008.
4. Beauchamp, Gray, **Hessel, David**, Rose, Nathan A., Fenton, Stephen J., "Determining Steering and Braking Levels from Yaw Mark Striations," Paper Number 2009-01-0092, Society of Automotive Engineers, 2009, published in the *SAE International Journal of Passenger Cars – Mechanical Systems* 2(1):291-307.