



Appendix A

Curriculum Vitae

PROFESSIONAL SUMMARY:

Forensic Visualization Expert specializing in evidence-based visual analysis and reconstruction for vehicle collisions, crime scene investigations, and premises liability matters. Works closely with forensic engineers to develop accurate, defensible visualizations based on physical and digital evidence. Experienced in translating complex technical information into clear visual representations for forensic analysis, litigation, and courtroom presentation.



EDUCATION:

B.S., Digital Art & Animation, The New England Institute of Art, Brookline, MA, 2011

EXPERIENCE:

Forensic Visualization Expert, Knott Laboratory, LLC, Centennial, CO, 2024 to Present

FORENSIC VISUALIZATION & 3D DESIGN

Mr. Goguen joined Knott Laboratory's forensic team in September 2024, applying his background in 3D design and digital visualization to forensic investigations. His work supports the analysis and reconstruction of incidents through the development of accurate, evidence-based visualizations.

He works closely with forensic engineers to develop visual materials that communicate physical evidence, scene conditions, and technical findings for a variety of case types.

His experience spans 3D scene reconstruction, photogrammetry, videogrammetry, matchmoving, point cloud processing, forensic video analysis, and the recreation of human and vehicle motion and equipment operation.

He is an FAA-Licensed Remote Pilot and performs aerial surveys and LiDAR-based site inspections for scene documentation and reconstruction.

AREAS OF EXPERTISE:

- Modeling, texturing, lighting, photorealistic rendering, and animation
- Photogrammetry, videogrammetry, and matchmoving
- LiDAR and drone-based data capture, point cloud processing and cleanup
- Video analysis, editing and compositing
- Evidence-based diagramming

SOFTWARE PROFICIENCIES:

- | | |
|--------------------------------------|--------------------------|
| • Autodesk 3D Studio Max | • Cyclone Register 360 |
| • Chaos V-Ray | • Cloud Compare |
| • Blender | • Autodesk Recap Pro |
| • ZBrush | • PhotoModeler Premium |
| • Adobe Substance Painter & Designer | • Adobe Premiere |
| • Adobe Photoshop | • Google Earth Pro |
| • Adobe After Effects | • Boris FX SynchEyes |
| • Unreal Engine | • Microsoft Office Suite |
| • Agisoft Metashape Professional | |

LICENSES AND CERTIFICATIONS:

- FAA-License Remote Pilot #5124999
- Advanced Photogrammetry for Collision Reconstruction – Lightpoint Learning

CONTINUING EDUCATION PRESENTATIONS:

- Presenter, Point cloud data processing and applications in forensic visualization
- Presenter, Camera and Video Fundamentals in Forensic Visualization

FORENSIC VISUALIZATION CASEWORK EXPERIENCE:

Workplace Accidents

- Slip events
- Trip events
- Fall events
- Machinery and electrical malfunction incidents

Shooting Incidents

- Officer-involved shootings analyzed through body-worn cameras, patrol vehicle footage, surveillance video, and mobile recordings
- Reaction time analysis
- Incident timeline development
- GPS data mapping
- Video synchronization

Vehicle Accident Reconstruction

- Pedestrian impact analysis and movement dynamics
- Commercial and consumer vehicle collision reconstructions
- Physically based simulation
- Dashcam and security footage synchronization
- Final rest positioning and evidence-based diagramming
- Speed calculations

VISUALIZATION PROCESSES:

- Drone and lidar data capture and conversion into point clouds and virtual 3D scenes
- Site reconstruction from video footage and photographs
- Motion capture and video-based human motion tracking
- Virtual sun and shadow analysis
- Vehicle and pedestrian tracking, plotting, and motion analysis
- Camera matching and perspective alignment
- Vehicle and biped animation aligned to video and photographic evidence
- Graphics creation for presenting data-driven visual analysis
- Tailored workflows depending on case requirements