



**MOMENTUM**  
engineering corp

**CURRICULUM VITAE**  
**RON L. KUTA**

**SPECIALIZATION**

- Computer Aided Drafting (CAD)
- Photogrammetry
- Advanced Graphics- Photoshop; Illustrator
- Video Editing/Production
- 3D Animation
- Mechanical Displays and Precision Models
- Advanced Presentation Design
- Architectural Models and Exhibit Creation

**EDUCATION and TRAINING**

- CAD Training courses
- 3D Studio Animation Courses and self-study
- Adobe Photoshop, Illustrator, and Adobe Platform courses
- Training courses in TopCon, ReCap and 3D Scanning software
- Advanced training in Polyworks 3D Modeler software
- El Camino Community College
- Advanced studies and recognition in technical drafting and architectural design
- Advanced graphics, including 3D Studio
- Detailed graphic layout with PowerPoint presentation
- Skilled in airbrushing, sculpture painting, and sculpting
- Classes in mathematics & mechanical drafting
- Machine shop courses in wood and metal

**PROFESSIONAL EXPERIENCE**

2008 to present

**MOMENTUM ENGINEERING CORP.**

***Senior Graphic Designer***

Generate AutoCAD drawings based on surveys, aerial photographs, inspection data, scene photographs and specifications provided by staff engineers. Build 3D scenes and models for demonstrative purposes. Generate animations using cutting edge software such as 3D Studio, AutoCAD, Photoshop, Adobe, TopCon, ReCap, and 3D Scan Software.

Assist with vehicle and site inspections, including taking measurements for use in developing CAD models and animations. Build 3D models of both crushed and undamaged vehicles using Photomodeler, AutoCAD, 3D Studio, scan data and vehicle photographs.

Develop exhibits for engineers and clients such as architectural quality scale models of an accident scene and mechanical models to show system function. Layout exhibit boards for use in courtroom trials. Assist with all facets of trial presentation. Participate in the set up of engineering tests and assist with all phases of testing.

1990 to 2008

**COLLISION RESEARCH and ANALYSIS**

Lead Graphic Designer

Constructed CAD drawings based on surveys, inspections, and data provided by engineers. Developed precision models of accident scenes and terrain, with scaled vehicles mounted in rollover sequences. Prepared, plotted, and laminated exhibit boards for use in courtroom trials. Generated various mechanical system displays. Developed special design products requested by clients. Constructed unique models for use in trial; including a full-size scale model of a 12 foot section of a flatbed trailer.

Conducted detailed inspections of vehicles, taking measurements used to reproduce a 3D model in CAD. Built 3D crushed and exemplar vehicle files using Photomodeler and multiple series of photos. Assisted engineers in setting up case-specific tests.

1986 to 1990

STANDARD COMMUNICATIONS

Graphic Designer

Responsible for diagrams used in operational manuals for radio equipment, done both manually and in CAD. Produced schematic diagrams and printed circuit board diagrams. Developed the layout and design of operational manuals; including the sequencing, text and diagram placement.

**TECHNICAL BACKGROUND**

**3D Animation:**

Prepare scientific 3D animations of automobile, heavy truck, bus, bicycle, motorcycle and pedestrian accidents for use in the courtroom setting. Use state-of-the-art animation techniques and software programs such as 3D Studio, AutoCAD, Adobe platform, ReCap, and TopCon.

**Exhibit and Presentation Design:**

Develop hybrid exhibits such as aerial photographs with CAD drawings of the physical evidence superimposed onto the aerial. Create mounted exhibit boards with call-outs. Mount and prepare exhibits for trial. Design PowerPoint digital presentations for use by clients and engineers.

**3D Architectural Models:**

Build scaled architectural models for use in court. Construct a scaled scene from start to finish. Place vehicle positions based on engineering reconstruction. Develop displays that can be easily used in a trial setting.

**Mechanical System Exhibits:**

Construct mechanical models for use as demonstrative exhibits. Sections of a vehicle, sub-system or other case-specific item are built at scale or at full-scale. Develop displays that can be transported to and used in court.

*Portfolio Available on Request*