



# Daniel B. Gant, MechEng

## Mechanical Engineer

Applying mechanical engineering principles to forensic investigation of mechanical failures and design defects in support of litigation. Experience includes analysis of electric propulsion systems, robotic assemblies, and industrial machinery failures. Skilled in identifying root causes through CAD modeling, prototype testing, and real-world failure reconstruction. Background includes aircraft manufacturing, automation equipment, and safety-critical systems.



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## PROFESSIONAL EXPERIENCE

### Mechanical Engineer

#### MK & Associates, LLC

Forensic engineering analysis that rings expertise in mechanical failure analysis and injury-producing accident investigation, with a strong foundation in complex systems and machine design. Skilled in applying forensic engineering principles to determine root causes of mechanical failures, including those involving industrial equipment, vehicles, and prototypes. Offers detailed, defensible analysis across a range of accident and failure scenarios.

### Contract Engineer

#### Figure Ai

Developed detailed assembly and process instructions for humanoid robot prototypes, including the design and testing of custom assembly tooling. Analyzed effectiveness of both tooling and procedures, implementing improvements to optimize future manufacturing iterations.

### Founder

#### Ascend Dynamics, LLC

Led the ground-up development of an electric personal aircraft, including CAD design, component sourcing, prototype fabrication, and performance testing. Conducted detailed thrust, power, and thermal evaluations of motor and propeller setups. Performed flight tests on sub-scale and full-scale unmanned prototypes, resolving motor controller overheating and enhancing flight stability through control algorithm adjustments.

### Consulting Engineer

#### Quad-M, Inc.

Consulting services on an aerospace project, contributing to the design updates of an improved space deployment system.

## INTERESTS

Motorcycles and rebuilding

Aircraft/flying

Family

## EDUCATION

**University of Minnesota  
Duluth (UMD)**

*Bachelor of Science,  
Mechanical Engineering*

## SOFTWARE TRAINING

*Solid Works*

*Onshape*

*Catia CAD programs*

*Rapid prototyping*

*3d printing*

## Manufacturing Engineer

**Cirrus Aircraft**

Developed tooling solutions and created detailed CAD models and drawings to support jet aircraft manufacturing. Assisted in process development for new production lines and collaborated with cross-functional and international teams to ensure design manufacturability and production efficiency.

## Mechanical Engineer

**Baysek Machines, Inc.**

Developed and upgraded multiple die cutting machine designs, leading analysis, testing, and performance improvements on new prototypes. Oversaw fabrication and assembly of major mechanical systems and coordinated comprehensive updates to parts and operations manuals.

## HANDS-ON TECHNICAL EXPERIENCE

Private Pilot with 111+ flight hours

FAA Part 107 sUAS Drone Operator

*Videography and mapping*

Radio-controlled model aircraft

*Includes fixed-wing and multi-rotor designs*

Motorcycle Endorsement

*2007 with 6,000+ miles*