Alex Grusin

Mechanical Engineering Student | Practical Systems Thinker | Technical Problem Solver

I'm a mechanical engineering student with a strong bias toward execution. I work at the intersection of design, analysis, and fabrication, translating complex problems into practical, testable solutions. My approach is grounded in evidence, iteration, and a clear understanding of system behavior-from material properties and thermal limits to control logic and mechanical interfaces.

I combine theoretical knowledge with hands-on ability, equally comfortable modeling in code or troubleshooting hardware. I value clarity, precision, and performance-whether debugging a simulation, refining a design, or tracking down the root cause of failure.

Core Strengths:

- Mechanical systems design and integration
- Numerical modeling and optimization
- Failure analysis and iterative testing
- Materials selection and processing
- Embedded systems understanding
- Hands-on fabrication and prototyping

Tools & Environments:

MATLAB | Python | SolidWorks | Simulink | VESC Tool | Oscilloscopes | Machining & Welding | Version Control

I'm looking for opportunities where engineering decisions have consequences-where clean design, deep understanding, and execution under constraints make the difference.