Aidan Boyer

Mechanical Design Engineer

Pragmatic perfectionist. Excels at generating novel mechanical concepts, with the expertise to transform PowerPoint engineering into functional hardware. Background in Robotics, 3D Printing, and Automotive Engineering.

Contact

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(973) 524-0215
Denver, CO

Education

B.S. MECHANICAL ENGINEERING, MINOR IN ENGINEERING MANAGEMENT
University of Colorado, Boulder – May 2024.

Skills

CAD (2000+ Hours:

NX, Fusion 360, &

Solidworks)

GD&T (ASME Y14.5 Professional)

Prototyping (7 Years of 3D printing experience, 9 years of robotics.)

FEA (Femap/Nastran)

Programming (Matlab, C++, EES)

Experience

MECHANICAL ENGINEER 1 | SIERRA SPACE
June 2024 – August 2025 (Current)

SMS Satellite Design Engineer | Responsible for modeling, drafting, and releasing flight hardware.

Systematic design methodology managing DTC/manufacturability, mass, stiffness, harnessing, EMI, thermal, grounding, pointing, and geometric constraints simultaneously.

Uses equation driven base sketching to create parametric models and express design intent, reducing churn between analysis cycles and improving traceability.

Highly collaborative role, working with analysts, checkers, quality, AI&T, and many more to ensure requirements are met.

BD Design Engineer | Responsible for development and assembly of non-flight prototype TLA's (Top Level Assemblies) given tight schedule and budget constraints.

Released 128 (37 flight) components within first year, including 3 BD TLA's on time and under budget, with minimal oversite. All components functioned as intended, zero reworks.

LEAD INSTRUCTOR | ROBOT REVOLUTION
May 2019 – August 2021

Taught fusion 360 to high school students. Encouraged holistic design – developing the entire system instead of compartmentalizing components into subsystems. Explained fundamental mechanical concepts such as friction, gear boxes, linkages, and lifts.