

JEFFREY MURITHI

PROFESSIONAL SUMMARY

Junior CAD Designer with hands-on experience in Autodesk Fusion 360, specializing in parametric modeling and mechanical concept development. Skilled in translating real-world ideas into accurate 3D CAD models suitable for prototyping and manufacturing workflows. Currently pursuing a Bachelor of Science in Informatics at Moi University while developing practical expertise in reverse engineering, product design, and fabrication-oriented modeling.

TECHNICAL SKILLS

CAD & ENGINEERING DESIGN

- Autodesk Fusion 360 (Parametric Modeling, Assemblies, Layout Design)
- Mechanical Part & Frame Modeling
- Product Enclosure Development
- Prototype-Oriented Design
- Design for Manufacturing (Foundational Understanding)
- Technical Visualization & CAD Documentation

3D MODELLING

- Blender (Modeling, Basic Rigging, UV Editing)
- Mesh preparation and visualization workflows

PROGRAMMING & TECHNICAL SUPPORT

- Python (Basic scripting and automation)
 - HTML, CSS, JavaScript
 - Linux Environment
 - Electronics Integration (Arduino-based prototyping)
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PROJECT EXPERIENCE

Handheld Simulation Controller — Product Design & CAD Development

- Designed a manufacturable handheld controller enclosure using Fusion 360
- Created a parametric two-part housing suitable for plastic fabrication
- Planned internal mounting features and structural support geometry
- Ensured consistent wall thickness and assembly feasibility
- Integrated rotary encoder, analogue inputs, and control layout into the mechanical design

Custom SxS — Tubular Spaceframe Design

- Modeled a lightweight tubular steel chassis using triangulated structural design
- Developed accurate frame geometry aligned with real fabrication constraints
- Considered drivetrain placement, suspension mounting, and modular construction

- Focused on strength-to-weight efficiency and practical manufacturability

Turboshaft Engine Concept Model (Supplementary)

- Built a detailed mechanical assembly to understand complex component relationships
- Practiced structured parametric modeling and assembly organization

ADDITIONAL EXPERIENCE

Hackathon Participant — Digital Tools for Journalists

June 2025

- Served as Lead Programmer in a rapid-development team environment
- Built core functionality for a working prototype under time constraints
- Collaborated with multidisciplinary team members to deliver a functional solution

EDUCATION

Bachelor of Science in Informatics

December 2027 (Expected Graduation)

Moi University, Main Campus

High School Diploma

2019 - 2022

Chogoria Boys High School

TOOLS

Fusion 360 | Blender | Python | Linux | HTML/CSS/JS