

Max Edward
www.m3ddesigns.com

Personal Statement

Dedicated design and robotics engineer with a passion for merging creativity and cutting-edge technology to innovate and bring ideas to life.

Core Qualifications

- Lean Six Sigma methodologies, DFMEA
- Electrical circuit design (Autodesk EAGLE, KiCAD)
- Programming abilities (G-code, Arduino, Microchip Studio, Python, Rust)
- CAD, CAE (Fusion 360, Inventor 2019 - 2021, SolidWorks 2018 – 2023, Siemens NX)
- CFD, FEA, topology optimization (Ansys, SimScale, nTopology, Meshmixer)
- Fabrication Ability (CNC, 3D Printing, Laser)
- Thrives on group projects, team engagement
- Focused on efficient and productive task completion

Education

University of Advancing Technology August 2023
Bachelor of Science, Digital Making and Fabrication GPA: 4.0
Bachelor of Science, Robotics and Embedded Systems

- Relevant coursework: Material Science, Mechatronics, Prototyping Tools and Practices, Internet of Things, Arduino Embedded Programming, Robot Navigation, PCB Build, Robot Competition

Professional Experience

Raytheon Technologies – Collins Aerospace Tempe, AZ
Advanced Manufacturing Engineer Intern May 2022 – August 2023

- Supported operation, maintenance, and repair of industrial additive machines.
- Identified additive machine deficiencies and facilitated design and fabrication for upgrade solutions.
- Developed procedure instructions for additive machinery and orchestrated visual training seminars.
- Coordinated the development of components and fixtures utilizing manufacturing processes.
- Influenced engineering authorizations and changes during design and fabrication processes.
- Streamlined additive part development, procurement, testing, and calibration

University of Advancing Technology Tempe, AZ
3D Build Tutor / DMF Supervisor March 2021 – December 2022

- Maintained multiple high-level fabrication machines, 3D printers, laser cutters, CNC machines.
- Enabled students to operate machinery through software and hardware advisory, influencing safety across the environment.
- Oversaw inventory management for raw materials, consumables, and spare parts, minimizing production disruptions through proactive resource management.
- Collaborated with professors and faculty to empower struggling students, promote healthy learning.
- Stayed current with industry trends and emerging technologies in additive manufacturing, incorporating new knowledge into teaching.
- Managed the scheduling and prioritization of multiple projects, ensuring efficient utilization of resources and timely project completion.

Project Showcase

- Firefly Aerospace - MaxMask PPE - Summer 2020
- Processor Design - Full Adder - Spring 2021
- KosselMax Dual Extrusion - Fall 2021
- IoT - M5 Fan Remote - Spring 2022
- M3D Macroboard – Spring 2022
- Mechatronics - Hotdog Machine - Spring 2022
- Materials - 3D Printed Fasteners - Summer 2022
- Electromagnetic Ring Accelerator - Summer 2022
- Prototyping Tools - Fan Fixture – Fall 2022
- Production Studio - Project Murphy - Spring 2023
- Comp Vision - Color Detection - Summer 2023
- Capstone - AutoVisor - Summer 2023

Additional

- Eagle Scout - Winter 2019
- SolidWorks, Associate Mechanical Design, 2020
- Brooke Cayce Leadership Award - Summer 2022
- Dean's List (Spring 2021 - Spring 2023)