

Adam DiMaio

Mechanical Engineer

📍 United States 📞 +1 (702) 954-2032 ✉️ adam.dimaio@outlook.com 🌐 <https://www.adamamerican.com> 📄 [Adam DiMaio](#)

Education	Utah Tech University Mechanical Engineering, BS GPA: 3.44	August 2021 – May 2025
Professional Experience	Utah Tech University 3U CubeSat: Communications Mechanical Engineer <ul style="list-style-type: none">• Worked in an Interdisciplinary Group of 4 on creating a reliable Uplink/Downlink Communication System for our CubeSat.• I specialized in R&D, Mechanical Design, CAD, and Manufacturing all the Mechanical Components on the Antenna Module.	August 2024 – May 2025 St. George, UT
	Brightline West Intern <ul style="list-style-type: none">• Researched, Analyzed, and Translated Technical Knowledge and Key Points of the Code of Federal Regulations (CFR) for a White Paper Document.• Created a detailed Hazard Log Analysis of Operations and Management Risk for Passengers and Staff During the Operational Phase of the High-Speed Railway.• Collaborated in the Creation of a Contractor Integration Matrix that represented the Interface Control Documents between Contractors.• Reviewed Certain Criteria from Engineering Drawings of the Track and Highway to Determine and Mitigate Associated Risks.	June 2024 – July 2024 Las Vegas, NV
	Brightline West Summer Associate <ul style="list-style-type: none">• Worked with the Design of Infrastructure Team on the pioneering project of introducing the first High-Speed Train system in the United States.• Assisted Rolling Stock Engineer in optimizing platform design, train dimensions, and layout for optimal performance and safety.• Collaborated with Systems Engineers to strategically position substations and design the layout of transmission lines for efficient power distribution.• Produced a comprehensive document outlining the Rail Neutral Temperature, a critical factor for the Maintenance of Way Engineer in ensuring safe and reliable railway maintenance.• Developed a Train Simulation Document utilizing Microsoft Excel to visually illustrate train departure and arrival times, optimizing the scheduling and operation of the high-speed trains.	May 2023 – July 2023 Las Vegas, NV
	Utah Tech University Research & Development Scholar <ul style="list-style-type: none">• Participated in the National Science Foundation funded INSPIRE program, which creates opportunities for students to solve real-world problems in small, interdisciplinary groups.• Worked within a group consisting of two Biology Majors and a Computer Science Major on creating a Proprietary Wearable Medical Device.• Used CAD, Coding, and Prototyping to create an innovative solution to help knee reconstruction surgery patients try and regain full range of motion faster.	August 2022 – May 2024 St George, UT

Certifications	<div>FE Mechanical Exam</div> <div>NCEES</div> <div>🔗 Badge</div>	February 2025
Current Projects	<div>New Shade Concept</div> <div><ul style="list-style-type: none">Working with a partner on creating a new pop-up shade device.Working on possibly getting a patent.</div>	Oct 2024 - Present
Skills	<div>Computer Aided Design (CAD) & Manufacturing (CAM) Software</div> <div>AutoCAD, OnShape, SolidWorks, Civil 3D, FreeCAD, Autodesk Fusion, Bluebeam</div> <div>Finite Element Analysis (FEA) Software</div> <div>ANSYS Workbench, Simcenter Femap with Nastran</div> <div>Fabrication/Manufacturing</div> <div>CNC Machining/Operations, Laser Cutting, Waterjet, 3D Printing, Manual Mill, Manual Lathe</div> <div>Programming</div> <div>MATLAB, Arduino, C++</div> <div>Microsoft Office Suite</div> <div>Excel, Word, PowerPoint, Teams, Visio</div> <div>Interdisciplinary Collaboration</div> <div>Followed Codes/Regulations</div> <div>MIL-STD-461F, ASCE 7-16, NASA-STD-6016, HIPAA Compliance, ANSI HE75:2009, FDA Guidelines, IP Ratings</div>	
Past Projects	<div>Electronic Motor Boat</div> <div>Paddle Prodigies</div> <div><ul style="list-style-type: none">Collaborated in a group of 5 (4 Mechanical and 1 Electrical Engineering Students)Tasked with creating the Propulsion System (Propeller & Rudder) using Fluid Mechanics, Finite Element Analysis, and MachineryAchieved about 218.62 N of Thrust Force on the Propeller</div> <div>Arcade Game</div> <div>Excalibur</div> <div><ul style="list-style-type: none">Collaborated in a group of 5 engineering studentsCoded with Arduino to combine states of the Arcade game, also did certain aspects of the design, 3D printing, and laser cutting</div> <div>Mini Electronic Golf Course</div> <div>National Parks</div> <div><ul style="list-style-type: none">Used a Laser Trip to Ignite a Fog Machine using Arduino to CodeCollaborated and worked within a group of 6 other engineering students</div>	<div>Jan - Apr 2024</div> <div>Jan - Apr 2023</div> <div>Jan - Apr 2022</div>
Interests	<div>Weightlifting</div> <div>Product Creation</div> <div>Nikola Tesla</div> <div>Traveling</div>	