

Aidan Law

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EDUCATION

University of Maryland School of Engineering

Sep 2024 – May 2028

Mechanical Engineering

Cumulative GPA: 3.63

- Dean's List (Fall 2024- Fall 2025)
- Relevant Coursework: Statics, Dynamics, Engineering Design, Thermodynamics, Computer Aided Design, Material Science

PROFESSIONAL EXPERIENCE

Publicis Health

Jun 2025 – Aug 2025 | Morristown, NJ

Data Engineering Intern

- Accelerated monthly client deck generation from several days to just 5 minutes by engineering an automated reporting pipeline using Python, SQL, and VBA
- Executed a targeted digital marketing campaign that successfully reached over 2,500 key healthcare executives by deploying data-driven Python scripts for ad serving
- Improved operational efficiency by 75% by analyzing complex healthcare datasets using Python and SQL to generate actionable insights

PROJECTS

Over-Terrain Autonomous Vehicle

Spring 2025

Electronics and Navigation

- Awarded 1st place in a competition for designing and building an autonomous, Arduino-powered vehicle with omni-wheels for advanced over-terrain navigation
- Led electronics wiring and integration of ultrasonic sensors, and an IMU for real-time environmental sensing
- Successfully transitioned an autonomous vehicle from design to physical prototype, achieving advanced over-terrain navigation by manufacturing custom components, assembling omni-wheels, and wiring Arduino-based electronics

Drill Press

Fall 2025

CAD

- Worked as part of a team to design a fully functional drill press model using SolidWorks, focusing on precision and mechanical accuracy
- Applied parametric modeling and constraint-based design to simulate part movement and system interactions
- Demonstrated the final model as part of a collaborative engineering showcase, showing technical and team skills

FEA Analysis Tool

Spring 2026

Python

- Developed a custom Finite Element Analysis tool in Python to simulate and visualize stress distribution and deformation in objects under gravitational load
- Integrated advanced open-source libraries, including Gmsh for complex mesh generation and OpenSees for structural analysis, to build a robust simulation environment
- Translated theoretical concepts from numerical methods into functional Python code to accurately model material behavior

SKILLS

CAD & 3D Modeling: SolidWorks, Fusion360, Autodesk Inventor, Arduino

Programming & Data: Python, C++, Java, SQL, VBA

Software Tools: Microsoft Excel, Microsoft PowerPoint, Matlab