Alex Vento

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EDUCATION

University of Notre Dame | Notre Dame, INMay 2026Master of Science in Engineering, Science & Technology Entrepreneurship (ESTEEM)GPA: 3.73University of Notre Dame | Notre Dame, INMay 2025Bachelor of ScienceGPA: 3.39

TECHNICAL AND LANGUAGE SKILLS

Major: Mechanical Engineering

Technical: Matlab, Python, Excel, PowerPoint, Solidworks CAD/CAM, Bluebeam Revu, Procore, CNC machining, AutoCAD, Carrier HAP, Optical Metrology

EXPERIENCE

Engineering Dynamics Corporation | Wailuku, Hawaii

June 2024 – August 2024

Engineer and Draftsman

- Created and updated construction drawings for state and county review or distribution to contractors.
- Collaborated with a mentor on multiple site visits to document existing infrastructure in order to provide construction drawings for permitting and county records.
- Designed HVAC and wastewater systems in accordance with local and national codes using Carrier's HAP Software..

ARCO/Murray National Construction | Downers Grove, Illinois

June 2023 – August 2023

Project Manager

- Coordinated closely with a lead project manager on buying out subcontractors, responding to RFIs, completing takeoffs, and completing closeout documents.
- Competed in a group-based capstone project, achieving a first-place finish for a presentation about integrating artificial intelligence, specifically language learning models, into the construction industry.

Dorvin D. Leis Co. | Kahului, Hawaii

June 2022 – August 2022

Project Manager's assistant

- Improved project manager workflow by handling relevant tasks, including take-offs, RFIs, material acquisition, and TAB, while building relevant skills in Bluebeam Revu and Procore.
- Designed a valve train to connect chilled water supply and return to fan coil units in the Kahului airport during a renovation.

LEADERSHIP AND ACTIVITIES

Robot Football | University of Notre Dame

October 2021 – May 2023

Pit Crew

- Assessed and carried out repairs or updates on robots that were not operational, needed new parts, or had become broken during practice events.
- Performed evaluations and key repairs on robots during the 2022 robot football combine and playoffs, helping Notre Dame secure a second-place finish in the playoffs.

RELATED COURSEWORK OR PROJECTS

Mechanical Engineering Senior Design Capstone | University of Notre Dame

January 2024 - May 2025

• Led electronics design for a robot that navigated an obstacle course and autonomously placed blocks to build a house. Focused on circuit design, sensor integration, software development, and motor control, also assisted with virtual model creation and fabrication of the final robot

Laser Precision Manufacturing Laboratory Research | University of Notre Dame August 2024 – December 2024

 Used optical metrology to parameterize the capabilities and better understand the settings of a MOPA laser to create the smallest possible engraving of the Notre Dame monogram on a given substrate.