Alexandra Schweid

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Education

University of Michigan, Ann Arbor, MI — September 2021-May 2025

- Anticipated B.S.E in Electrical Engineering and Minor in Art and Design
- GPA: 3.795
- Relevant Coursework: Intro to Signals and Systems, Intro to Computer Organization, Programming and Intro to Data Structures, Electrical Engineering Systems Design 1, Design and Manufacturing 1

Work Experience

General Motors, Warren, MI — May 2023- August 2023

Safety Validation and Hardware Engineering Intern

- Awarded DFSS Green Belt Certification for designing a relay board to allow for autonomous control of vehicle testing CAN Bus panels
- Utilized an arduino and C/C++ programming to build an application to control the relay board remotely
- Relay board design was applicable and easy to install for all 50+ vehicle testing benches in the laboratory
- Wrote a data analysis program to automate verification of 100+ signals for vehicle safety simulation testing

University of Michigan Marine Hydrodynamics Laboratory, Ann Arbor, MI — May 2022- April 2023

Lab Research Intern

- Designed and manufactured award plaques for middle and high school marine engineering competitions
- Ran experiments to measure the resistance of ice on destroyer's hulls with over 7,000 wiffle balls for NEEC
- Facilitated STEM Outreach programs for various camps and future students

University of Michigan Science Learning Center, Ann Arbor, MI — January 2022-April 2022

Physics 140 Study Group Facilitator

- Led and organized weekly study group sessions for 15 students currently enrolled in Physics 140- Mechanics
- Acted as a resource for other students outside of class time to supplement their learning

Projects

EECS 280: Programming and Introduction to Data Structures Euchre Project, Ann Arbor, MI — Winter 2023

- C++ program to simulate the card game Euchre and supported human and AI players
- Applied knowledge of classes, derived classes, inheritance, and designed the driver program to run the game

Mechanical Engineering 250: Design and Manufacturing 1 Final Project, Ann Arbor, MI — Fall 2022

- Used CAD to design a robotic machine to pick up and deposit cubes for a class wide competition
- Learned to create manufacturing plans, and operate a mill,lathe, and 3D printer

Activities

University of Michigan Aeronautics and Space Administration, Ann Arbor, MI — September 2021-Present

Avionics Subteam Member

- Assisted on the harnessing subproject: instructed new members on creating wiring harnesses to supply power and collect sensor data for the rocket during testing
- Testing operator for coldflows and assisted in hotfire testing in the Mojave Desert for the rocket engine

Skills

- C++, Matlab, Python, C/C#, Verilog
- Autodesk Inventor, Solidworks
- Adobe Photoshop and Illustrator