

# Sirawit Shimpalee

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## Education

### University of Michigan

Ann Arbor, MI

Bachelor of Science in Naval Architecture and Marine Engineering

April 2025

- **GPA:** 3.89/4.00
- **Awards/Honors:** William J. Branstrom Freshman Prize (Top 5% of first term freshman class, Fall 2021), James B. Angell Scholar Award (All A's for consecutive terms, Fall 21, Winter 22), American Bureau of Shipping Scholarship (Spring 22, 23), Armin and Linda Troesch Scholarship (Spring 22), 1st Place Winner at NSWCPD Summer Hire Poster Session (Summer 23), Ted Van Zelst Award (Fall 23), Merchants Exchange Scholarship Award (Fall 23)

## Skills and Certifications

- **Certifications:** Solidworks Associate in Mechanical Design, Solidworks Associate in Additive Manufacturing, PADI Open Water Scuba Diver Certified, Basic II Machine Shop Certified
- **Software:** Solidworks, AutoCAD, CATIA, XFlow CFD Software, Star - CCM+, SigmaPlot, Java, MATLAB, C++, Python, Microsoft Office, NI DAQExpress, General Hydrostatics, OpenFOAM, SysML
- **Physical Skills:** experience in use of saws, woodwork, oscilloscopes, and open channel flumes

## Relevant Experience

### Naval Research Enterprise Internship Program, Philadelphia Division

Philadelphia, PA

Student Research Intern

May 2023 - August 2023

- Designed a wargame to assist in the creation of a future humanitarian ship
- Formulated a methodology to analyze ship performance by selecting traits relevant to project
- Conducted test runs of the wargame with different groups and made appropriate adjustments
- Developed SysML diagrams and documents for transition into next group for autumn

### Naval Research Enterprise Internship Program, Philadelphia Division

Philadelphia, PA

Student Research Intern

June 2022 - August 2022

- Assisted with Littoral Combat Ship refrigeration research at the Naval Surface Warfare Center
- Researched causes of condenser failure and prevention using maintenance data and papers
- Calculated weight and moment changes for refrigeration systems on amphibious assault ships
- Presented findings to mentors and other student interns through poster presentations

### Research Scholars Program

Ann Arbor, MI

Student Research Assistant with Dr. Jeremy Bricker

September 2021 - April 2023

- Investigated "Tsunami impact on breakwaters and seawalls" and overflow pressure phenomena
- Collaborated with PhD student in lab to help run operation and data collection in flume
- Proposed a method to determine scour damage using lidar from an iPad Pro and MATLAB code
- Wrote two papers summarizing research progress in evaluating breakwater damage from tsunamis

## Select Extracurricular Activities

- **Membership Officer** | Tau Beta Pi, Michigan Gamma Chapter 2022 - Present
- **Member** | Quarterdeck Society, SNAME UM Chapter 2022 - Present
- **Principal Oboist** | Concert Orchestra, UM Organization 2021 - 2022