

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Master of Science, Naval Architecture & Marine Engineering

Cambridge, MA
2024-Present

Relevant Coursework:

- *Marine Autonomy, Sensing, and Communication*
- *Seakeeping of Ships and Offshore Energy Systems*
- *Marine Hydrodynamics*
- *Marine Power and Propulsion*

U.S. COAST GUARD ACADEMY

New London, CT
2015-2019

Bachelor of Science, Naval Architecture & Marine Engineering, GPA 3.51, *Magna Cum Laude*

- Society of Naval Architects and Marine Engineers Undergraduate Paper Award Winner, 2018 & 2019
 - Capstone Design Project: Northern Inland Towing Vessel
 - Individual Design Project: Ocean Cruiser Sailing Vessel
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EXPERIENCE

U.S. COAST GUARD

Graduate Student; Massachusetts Institute of Technology

Cambridge, MA
2024-Present

- Co-developed shipboard electrical power simulator; utilized novel approach of stateless equipment behavior modeling with parallelized computing algorithms for fast microgrid simulations.
- Coordinated data collection aboard vessels for Non-Intrusive Load Monitoring research and development of machine learning based equipment recognition.

Project Manager; Surface Forces Logistics Center

Alameda, CA
2021-2024

- Led project execution for \$30 million of ship maintenance over five projects spanning 60-180 days, enabling on-time deployment of all ships; rated as top performer among peers by supervisor. Recognized by senior leaders with an award for superior performance.
- Led \$2 million installation of prototype systems, including improved boat launch and recovery system and vessel fire detection system. Streamlined designed modification and contract adjustments necessary to fit to ship within limited timeline.
- Volunteered as Command Financial Specialist for 150-person organization. Provided fundamental personal finance resources and training to members.

Engineering Division Officer; USCGC *Polar Star*

Seattle, WA
2019-2021

- Led planning and execution of shipboard training team's emergency response training to 130+ members during and in advance of winter deployment to Bering Sea.
 - Navigate the vessel in austere ocean and ice conditions. Obtained ice pilot qualification outside of expected engineering duties and trained junior members in ice breaking techniques.
 - Led quality assurance efforts on mission-critical seawater system during extensive sustainability repairs. Identified 20 contract discrepancies, avoiding \$100K in growth work.
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ADDITIONAL INFORMATION

CERTIFICATIONS

Project Management Professional (PMP) - PMI (Ref. ID: 345253)
Merchant Mariner Credential, 100T Master - USCG (Ref. ID: 8391042)
Engineer in Training - NCEES (Ref. ID: EIT.0012591)
Open Water Diver - PADI (Ref. ID: 23050M5058)

PUBLICATIONS

Loading Conditions for Exposed-Waters Towing Vessels Regulated under Subchapter M
Journal of Ship Production and Design - May 1, 2020

INTERESTS: Autonomous Systems, Renewable Energy, Machine Learning, Mountaineering, Snowboarding, Cycling, Sailing, Scuba Diving, Space Exploration, Financial Literacy