Brendan M. Unikewicz

Cell: (860) 301-3660;

brendan.m.unikewicz@lmco.com

EDUCATION

Ph.D., Ocean Engineering
University of Rhode Island

Narragansett, RI
9/2019 – Present;

M.Sc., Ocean Engineering
University of Rhode Island

Narragansett, RI
5/2019

B.Sc., Ocean Engineering (Summa Cum Laude)
University of Rhode Island

Narragansett, RI
5/2018

PROFESSIONAL HISTORY

Ocean Engineer Senior: 07/2020 – Present

Employer: Lockheed Martin; Middletown, Rhode Island

Rotary and Mission Systems: C6ISR

Ocean Systems Engineer: 07/2018 – 07/2020

Employer: Lockheed Martin; Middletown, Rhode Island

Rotary and Mission Systems: C6ISR

Ocean Systems Engineering Intern: 05/2017 – 07/2018 **Employer:** Lockheed Martin; Middletown, Rhode Island

Rotary and Mission Systems: C6ISR

Acoustics Engineering Intern: 05/2016 – 09/2016

Employer: Naval Undersea Warfare Center; Newport Division (NUWCDIVNPT) Sensors and SONAR Systems: Advanced Concepts Division: Prototype Development

GRADUATE ASSISTANTSHIPS

Robotics for Complex Undersea Environments: 09/2019 – Present **Employer:** Univ. of Rhode Island; Ocean Engineering Department

Experimental Fluid Mechanics Laboratory: 01/2019 – 06/2019 **Employer:** Univ. of Rhode Island; Ocean Engineering Department

Undersea Robotics & Imaging Laboratory: 05/2018 – 09/2018; 05/2019 – 09/2019

Employer: Univ. of Rhode Island; Ocean Engineering Department

Graduate Teaching Assistantship: Ocean Engineering Department: 09/2018 – 05/2019

Employer: Univ. of Rhode Island; Ocean Engineering Department

UNDERGRADUATE ASSISTANTSHIPS

Undersea Robotics & Imaging Laboratory: 12/2017 – 5/2018 Employer: Univ. of Rhode Island; Ocean Engineering Department

Experimental Fluid Mechanics Laboratory: 9/2016 – 12/2016 **Employer:** Univ. of Rhode Island; Ocean Engineering Department

RESEARCH VESSEL (R/V) CRUISES

R/V Neil Armstrong: Advance Novel Autonomous Underwater Vehicle Systems for Full-Ocean Depth Exploration and Research; 09/10/2019 – 09/15/2019

R/V Falkor: *Designing the Future*; 10/09/2019 – 10/18/2019

PROJECTS FOR PUBLICATION

- 1. **Unikewicz, B.M.**, Phillips, B.T., Dahl, J.M., *Design and formulation of a flow-orienting hydrofoil for AUV operations and hydrodynamic parameter estimation*.
 - Prepared for submittal towards Journal of Oceanic Engineering
- 2. **Unikewicz, B.M.**, Phillips, B.T., Dahl, J.M., *Utilizing fiber Bragg grating arrays to measure deep water wave heights through hydrodynamic analysis of undersea cabling.*
 - In-preparation towards Journal of Fluids and Structures
- 3. Clark, J., Dahl, J.M., **Unikewicz, B.M.,** Passive Object Detection Via an Artificial Lateral Line and a 2D Viscous Flow Model
 - In-preparation towards Journal of Bioinspiration and Biomimetics
- 4. **Unikewicz, B.M.**, Phillips, B.T., *Embedded Deep-Sea Fiber Optic Distributed Temperature Sensing Systems for Long-Term Ocean Observatory and UUV-Based Applications*.
 - Active research project; for more information please contact directly
- 5. **Unikewicz, B.M.**, Licht, S., Control of Autonomous Underwater Vehicles in Stratified Fluids and Near Surface Operations.
 - Active dissertation project; for more information please contact directly

BAA PROPOSAL ACTIVITY:

For an active list of my industry proposal activity please contact brendan.m.unikewicz@lmco.com

1. National Aeronautics and Space Administration (NASA) – Lunar Loo Challenge A Self-Contained Lunar- and Micro-Gravity Waste Management System for NASA's Artemis and Human Landing System Program.

Amount: **\$20,000** PI: **Unikewicz, B.M.** Status: **In-Progress**

2. American Society of Engineering Education (ASEE) – National Defense Science and Engineering Graduate (NDSEG) Fellowship:

Control of Autonomous Underwater Vehicles in Stratified Fluids and Near Surface Operations.

Amount: \$123,800 PI: Unikewicz, B.M. Status: Awarded

3. Office of Naval Research (ONR) – Defense University Research Instrumentation Program (DURIP): Embedded Deep-Sea Fiber Optic Distributed Temperature Sensing Systems for Long-Term Ocean Observatory and UUV-Based Applications.

Amount: **\$292,468** PI: Phillips, B.T.

Key Personnel: Unikewicz, B.M.

Status: Awarded

Total Awarded to Date: \$416,268

LEADERSHIP ROLES & VOLUNTEER EXPERIENCE:

Ally & Advocate – Women's Impact Network Business Resource Group: 06/2020 – Present Engineering Tutor and Mentor: 09/2015 – Present President of Omega Epsilon – The Ocean Engineering Honor Society: 5/2017 – 5/2018 Division IA University of Rhode Island Men's Rugby: 9/2014 – 5/2017

ENGINEERING HONORS & PROFESSIONAL AFFILIATIONS

- 2020 ASEE NDSEG Fellowship
- 2020 NREIP Fellowship
- 2019 2022 NEEC Ph.D. Student
- 2019 NSF Graduate Research Fellowship, Honorable Mention
- Lockheed Martin 1,000 Hours Award
- Lockheed Martin, C6ISR 2017 2018 Intern of the Year
- Tau Beta Pi The Engineering Honor Society
- Omega Epsilon Ocean Engineering Honor Society
- Dr. J.C. Swanson Ocean Engineering Scholarship
- Robert Edmund Marcille Engineering Scholarship
- American Society of Naval Engineers
- Institute of Electrical and Electronics Engineers (IEEE)
 - Instrumentation and Measurement Society;
 - o Oceanic Engineering Society;
 - Robotics and Automation Society;

REFERENCES AVAILABLE UPON REOUEST