# 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:**

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