Huy Huong

huyhuon02@gmail.com | (203) 683-8037 | linkedin.com/in/huyhuong

Education

University of Maryland, MS in Aerospace Engineering — Expected May 2027

University of Bridgeport Honors Program, — May 2025
BS in Computer Science & Mathematics, Minor in Physics

- Cumulative GPA: 3.692/4.0
- **Coursework:** Fluid Mechanics, Advanced Data Analytics, Analysis of Algorithms, Heat Transfer

Honors and Awards

Academic Achievement Award for BS. Computer Science Recipient, Spring 2025

University of Bridgeport Outstanding Involvement by a Junior Award Recipient, Spring 2024

Upsilon Pi Epsilon International Honors Society: Delta Chapter Member, Spring 2022 - Spring 2025

Connecticut Space Grant Consortium Undergraduate Scholarship Recipient, Fall 2022

University of Bridgeport Honors Program, Fall 2021 - Spring 2025

University of Bridgeport College of Engineering Dean's List, Fall 2021 - Spring 2025

Published Conference Proceedings

[2] **H. Huong**, S. Gudi, V. Sripada, J. Urrea Vargas, M. O. AL-Torzi, K. Bird, and J. M. Pallis. "High Altitude Robotic Monkey". *2025 ASEE Annual Conference & Exposition*. https://doi.org/10.18260/1-2–56690. Montreal, Quebec, Canada: ASEE Conferences, June 2025.

[1] V. Sripada, M. O. AL-Torzi, **H. Huong**, J. D. Urrea Vargas, S. Gudi, A. L. Iorio, J. M. Pallis, and J. McNitt-Gray. "Modification of a 1-Person Submarine for Remote Control Operation". *2025 ASEE Annual Conference & Exposition*. https://doi.org/10.18260/1-2–56974. Montreal, Quebec, Canada: ASEE Conferences, June 2025.

Refereed Posters

[4] **H. Huong**, M. O. Al-Torzi, J. Urrea Vargas, R. Mitra, N. Zoghb, and J. Pallis. *University of Bridgeport High-Altitude Ballooning Program - Past and Future*. Minneapolis, MN, May 2025.

[3] **H. Huong**, J. Medina, A. Armatis, C. Lara, and S. Patel. *LawnBot: Affordable Autonomous Lawnmowers*. Bridgeport, Connecticut, USA, Mar. 2025.

[2] **H. Huong**, J. Urrea Vargas, V. Sripada, D. Howard, J. Pallis, D. Mestre, L. Reed, G. Moyher, and S. Zhang. *High Altitude Monkey 2.0*. Poster presented at Between Eclipse Research Conference (BERC 2024). Virtual, Jan. 2024.

[1] **H. Huong**, J. Urrea Vargas, V. Sripada, A. Saoudi, S. Gudi, D. Howard, R. Beadle, J. Pallis, D. Mestre, L. Reed, G. Moyher, and S. Zhang. *High Altitude Ballooning During the 2023 Annular Solar Eclipse*. Poster presented at Between Eclipse Research Conference (BERC 2024). Virtual, Jan. 2024.

Research Experience

Undergraduate Researcher, Exploring Naval Underwater STEM – Bridgeport, CT — Dec 2023 to Aug 2025

- Working on upgrading "The Explorer" submarine to ROV by addressing corrosion issues and implementing design changes, ensuring progress towards the Summer 2025 deadline
- Tasked with improving deep-sea exploration capabilities, I constructed, modified, and operated a BlueROV 2 kit with high-precision sonar, enabling successful dives and data collection at depths of up to 500 meters
- Developed VBA macros in Excel to automate weekly schedule tracking and calculations, streamlining processes by interpreting color-coded cells, saving time, and reducing errors in project management

Student Pod Lead, Nationwide Eclipse Ballooning Project (NEBP) – Bridgeport, CT Sept 2022 to Aug 2025

- Accomplished successful data collection during the Annular and Total solar eclipses by leading a team of 10 engineers to design payload systems that withstood 100+ MPH winds and altitudes over 100,000 feet
- Accomplished real-time flight tracking and internet broadcasts by developing a telemetry GUI to track GPS and video signals from high-altitude balloons, resulting in live footage capture across 33 miles
- Ensured successful completion of project milestones by supervising several teams of students and faculty across the East Central Region, resolving hardware and software issues, resulting in efficient project execution
- Improved team communication and project progress by organizing weekly meetings and collaborating with the Principal Investigator, resulting in milestones being met on time

Team 2149 Lead, Great Lunar Expedition for Everyone (GLEE) – Bridgeport, CT Apr 2022 to Sept 2023

- Led an interdisciplinary team of 10 to design, test, and prepare for the launch of "LunaSat" payloads, which were engineered to conduct localized scientific missions on the lunar surface
- Facilitated team meetings and cross-functional collaboration, improving communication and ensuring efficient problem-solving throughout the project

Projects

Senior Design Project: LawnBot

- In development of an autonomous lawnmower vehicle for routine lawn care maintenance via the usage of ultrasonic sensors and machine learning

High Altitude Robotic Monkey (HAM)

- In development of reconstructing and developing a high altitude robotic monkey for near space research, improving motions and circuitry to reduce payload weight
- In development of custom circuitry to streamline connections and improve power delivery

Parrot Oriented Logical Interface (POLI)

- Developed a bilingual speech recognition engine in C++ using the Nano BLE Sense onboard microphone to address the need for real-time transcription, significantly enhancing the project's interactive capabilities
- Created a virtual 3D "parrot-like" model in SolidWorks by drafting all parts to scale and applying geometrical constraints, improving the accuracy of the prototype's visualization and its presentation to stakeholders

Employment

Graduate Research Assistant, UMD Motion and Teaming Laboratory – College Park, MD Aug 2025 to Present

STEM Instructor, University of Bridgeport STEM on Wheels – Bridgeport, CT May 2023 to July 2025

- Designed and delivered engaging, hands-on STEM lessons and activities for K-12 students, bringing science, technology, engineering, and mathematics concepts to life through mobile outreach
- Enhanced student understanding of complex STEM topics by offering unique, immersive experiences within a mobile laboratory setting, sparking interest in fields like robotics, coding, and engineering
- Adapted STEM curriculum to different grade levels, ensuring that students from elementary through high school could participate in and benefit from advanced, hands-on experiments

Undergraduate Researcher, UB Extreme Environments Laboratory, Bridgeport, CT Sept 2022 to Aug 2025

- Led outreach efforts for grants funded by the National Science Foundation, U.S. Naval Department of Education, and NASA, providing STEM materials and hands-on activities to underserved, low-income communities
- Conducted experiments and tests on materials and systems in extreme conditions to validate their performance for aerospace and deep-sea applications

Tier 1 Support Agent, University of Bridgeport IT Helpdesk, Bridgeport, CT Sept 2021 to Jun 2022

- Diagnosed and resolved technical problems using support materials and hands on expertise
- Assisted students and faculty through troubleshooting processes, providing resources for future reference in the event of similar future issues

- Set up and configured PC workstations across campus to ensure stable operations for students and faculty

Leadership & Service

Balloon Payload Program, University of Maryland, College Park, MD — Aug 2025 to Present
Vertically Integrated Project Subject Matter Specalist

- Guided second & third year undergraduates in a project course over the Fall 2025 Semester

American Society for Engineering Education (ASEE) — July 2025 to Present
Student Member-At-Large

Aerospace Club, University of Bridgeport, Bridgeport, CT — Apr 2022 to May 2025
President

- Led and organised club activities, workshops, and guest lectures focused on aerospace engineering topics, fostering collaboration and hands-on learning opportunities for students across multiple disciplines.

Student Government Association, University of Bridgeport, Bridgeport, CT — Sept 2022 to May 2025
Member

- Worked with clubs and communities across campus to initiate programming for the entire student body.

Skills

Languages: C++, C, Java, Python, VBA

Software: AutoCAD, Solidworks, MATLAB, MS Suite

Machining: 3D Printing, Laser Cutter, Lathe, Mill

Other: Live Telemetry Systems, High Altitude Ballooning