

## Outreach Activities

As the pioneering autonomous underwater vehicle in the Caribbean, RUMarino has experienced consistent growth, fueled by the steadfast support of our sponsors and surrounding community. Our initiative has transformed the educational and technological landscape, serving as a catalyst for outreach and innovation. Committed to building meaningful connections, we continually seek opportunities to give back by sharing our expertise and passion. Through interactive workshops and informational booths, we engage students both on campus and from external institutions, sparking interest in robotics and marine technology. Our outreach extends beyond academic circles—RUMarino has also connected with local schools and hosted recreational events such as pickleball, 8-ball pool, and dominoes tournaments. These activities encourage team spirit, wellness, and community involvement, reinforcing our mission to inspire and uplift through inclusive engagement.

### A. Campus Outreach

#### a. Campus Open House

The campus open house is an event where high school students and other interested visitors explore the university, with a focus on the College of Engineering, to learn about the innovative projects and research opportunities available. RUMarino participates annually in this initiative, inspiring future engineers and sparking interest in the fields of autonomy and robotics.



Figure 11: Our team representation in the Open House.

#### b. “Futuros Colegiales” Event

For this activity, RUMarino was able to present the project to high school graduation candidates from the Antonila Vélez School in Aguadilla and La Academia Interamericana de Arecibo, moving towards the STEM field. Being able to present this students how robotics are implemented in autonomous underwater vehicles.



Figure 12: Our team representation with the students of “La Academia Interamericana de Arecibo”.

#### c. L3Harris Shark Tank

The team participated in a Shark Tank-style competition sponsored by L3Harris, where they were challenged to present why RUMarino deserved sponsorship. The objective was to demonstrate how the team’s mission and vision

aligned with L3Harris' core values. After submitting a compelling video highlighting the project's impact and relevance to the company's goals, RUMarino advanced to the final stage. In this phase, team leaders presented live in front of a panel of L3Harris employees, ultimately earning third place and securing both funding and official sponsorship for the team.



Figure 13: Our team presenting in the L3Harris Shark Tank.

#### d. Exploring the Depths of Underwater Robotics

The team organized a dynamic panel discussion featuring fellow participants from the RoboSub 2024 competition. Represented teams included the University of Alberta's ARVP, Embry-Riddle Aeronautical University's Team Unsinkable, and the 2024 champions, Desert WAVE from the Si Se Puede Foundation. This event aimed to engage students and enthusiasts in the fields of autonomy and robotics by offering a unique opportunity to gain insights into the competition, explore the strategies behind each team's success, and understand how these innovative projects have grown and evolved over time.



Figure 14: Day of the activity.



Figure 15: Promotion of the activity.

#### e. IAP events

The Industrial Affiliate Program is an initiative active learning model that integrates theoretical insights with hands-on industry experience. Multiple companies unite to aid multiple special projects and investigations and RUMarino is part of this program. Yearly the team presents a poster for the upcoming work to be done in the semester and a presentation right before the school year ends to showcase the work done.



Figure 16: Our team representation with our Dean.

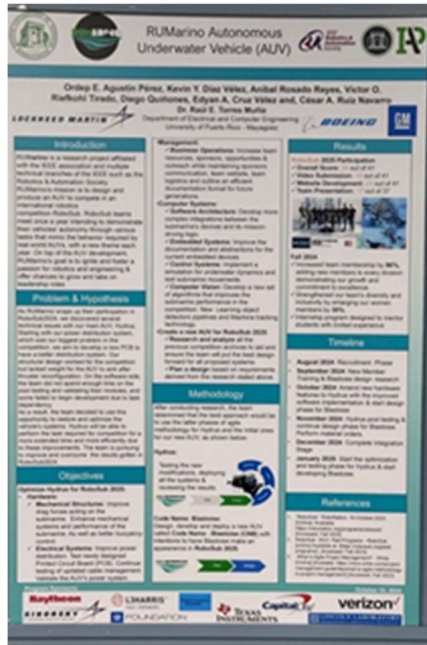


Figure 17: The poster that was presented in this first event.

#### i. Company Night (IAP Event)

This event provides engineering projects and research initiatives with the opportunity to host informational booths and present their work to the companies participating in UPRM's annual Fall Job Fair. RUMarino showcased its achievements from the RoboSub 2024 competition, outlined its goals for the upcoming year, and introduced its current vehicle, Hydrus. Over 30 companies visited the booth, allowing the team to engage in valuable networking and initiate new sponsorship discussions with several organizations.



Figure 18: Our team representation on the Company Night.

#### ii. Work Update Presentation at the end of school year

The team had the opportunity to present the work accomplished throughout the academic year, along with the modifications made to our AUV in preparation for RoboSub 2025.



Figure 18: Our team representation on the Work Update Presentation.

### B. School Outreach

#### a. Colegio Sagrado Corazón

The team visited Colegio Sagrado Corazón in Ponce, PR, where they collaborated with the school's SHPE Jr. Chapter to deliver a



presentation about RUMarino, its mission, and its impact on both the campus and its members to eleventh grade students. The goal was to inspire the attending students to explore careers in engineering and spark their interest in autonomy and robotics.



*Figure 19: Our team representation with the students of “Colegio Sagrado Corazón”.*

b. Escuela de Matemáticas, Ciencias y Tecnología (EMCT) – San Juan, PR

The team visited the Escuela de Matemática, Ciencias y Tecnología in San Juan PR, (Specialized School in Math, Science and Technology) to participate in the school's Big Mentor program—an initiative that offers special informational sessions to 9th grade students about college opportunities. During the visit, RUMarino presented its mission, goals, and the team’s impact on both the campus and its members. The objective was to encourage students to consider careers in engineering and spark their interest in autonomy and robotics.



*Figure 20: Our team representation presenting to the students of the “Escuela de Matemática, Ciencias y Tecnología”.*



*Figure 21: Certificate of appreciation for our participation.*

C. Lab Visits

In this past year the team also received the visit of sponsors, to learn more about how we work in our operations and general updates with our AUV’s alongside visit from curious students just wanting to learn. We hope to exchange knowledge and build lasting conexions.



Figure 22: Part of team leads and our sponsors

#### D. Pickleball Tournaments

This academic year, one of our student advisors introduced pickleball to the team after picking up the sport himself. His initiative encouraged members to adopt it as a fun and effective way to stay active, relieve stress, and improve mental clarity. As the team geared up for RoboSub 2025, the idea of hosting pickleball tournaments emerged—not only as a form of team bonding and physical wellness, but also as an innovative way to raise funds and gain visibility within the community. Given the growing popularity of pickleball in Puerto Rico, RUMarino Pickleball Club was created and successfully organized three tournaments that brought together players, supporters, and local enthusiasts. These events allowed the public to engage with the team beyond robotics and generated interest from potential sponsors. For the final tournament, the team proudly secured sponsorships from La Pregunta Pickleball Store and Deporte 24/7, marking a significant step in community outreach and fundraising efforts.

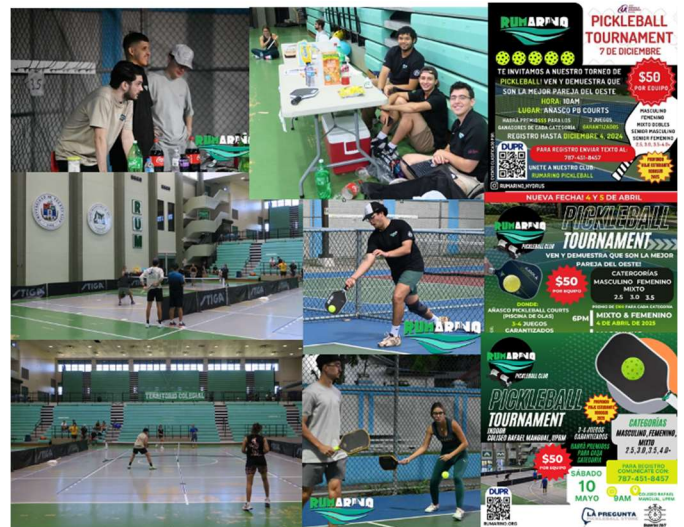


Figure 23: Images of the tournaments and the promotions of the events