ASTA/Team Inspiration
Community and Outreach Activities

Emma Chan and Ruth Tu

Team Inspiration's motto is "To Learn, To Share, To Innovate, and To Inspire." Guided by this motto, we take part in a variety of outreach programs to educate the next generation about robotics. Over the years, Team Inspiration has promoted RoboNation's competitions and the skills they teach through both local and global outreach. Building on our outreach from previous years, this season we also organized the Autism Tree Open House, RoboNation Tech Talks, and a webinar. In total, we reached more than 1,800 students through 19 outreach events across seven countries.

Through word of mouth, outreach, and networking, we have successfully recruited new members and mentors (Fig. 1). For example, after we mentored Team Project Poseidon during RoboSub, their team lead, Arkoprotik Acharya, joined our RobotX team.

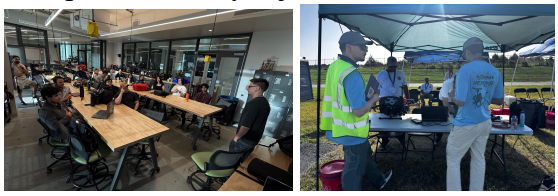


Fig. 1. Introducing Team Inspiration to UCSD students (left) and meeting with Krunal, our new mentor (right)

We invited the Autism Tree organization to tour our lab, build and program simple robots, and learn about RoboNation. The students interacted with SeaPerches and a BlueBoat (Fig. 2), and we plan to continue these visits as monthly activities, as we have with the Included Autism organization in the past.



Fig. 2. Team Inspiration demonstrating the BlueBoat and students building their simple robot

Other local outreach events this year included the Miramar Air Show, Navy Gold Coast, Marine Technology Society events, the Blue Tech Maritime Museum outreach, the San Diego SeaPerch Regional Competition, UrbanLife Ministries, Manna's Martial Arts, An-Nur Learning Academy, and the University of San Diego STEAM Youth and Community Conference. We also mentored the Mesa College Full Self-Driving Go Kart team.

Globally, we coach six *FIRST* Global teams every week, working with coaches abroad to create a transformative robotics experience for their students (Fig. 3).

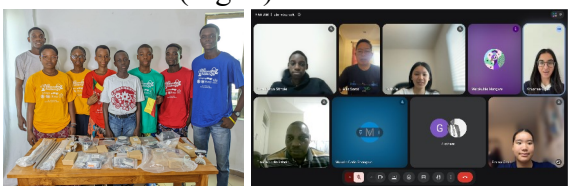


Fig. 3. Benin team members with their robot parts (left) and mentoring meeting with Eswatini team members (right)

Beyond outreach, our team is eager to apply our marine autonomous vehicle knowledge to real-world challenges. This year, eight team members earned ocean engineering related internships including submersible vehicle, command/control system, diver navigation and communication console, underwater magnetic sensor research, and underwater lighting/vision equipment. The team helped a local company with its research by retrofitting our WAM-V from RobotX.



Fig. 4. WAM-V operating in San Diego water