

Team Inspiration January Newsletter 2023

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RoboSub



The team is preparing for the RoboSub 2023 Competition and is well on its way bringing to life the newest sub ONYX. The team is taking on new challenges through designing external payloads such as the scanning imaging sonar, torpedo launcher, marker dropper, and gripper in anticipation for the 2023 team handbook to be released. The team has achieved over 1.5 hours of water testing with its previous subs and sensors this month.

FIRST Tech Challenge



With the FTC 2023 league championship coming up in February, the team is working on their third and final prototype of the robot, Trench. In the month of January, the team focuses on improving both hardware reliability and autonomous software. The team competed at the 3rd league meet of the season. The team is also excited to have new team members shadowing them.

New Year's Resolutions

With the new year comes new resolutions. As for RoboSub, the team aims to develop two subs for the 2023 competition, while also maintaining a reputed ranking in the documentation category. To accomplish these goals, the team has decided to lay a strong foundation by starting early in the season and meeting regularly. Similarly, the young FTC team aims to follow their alumni path to be a role model. To achieve this, the FTC team is leveraging its alumni and mentors, and is actively conducting outreach events. Ultimately, Team Inspiration will continue to embody its mission of To Learn, To Share, To Innovate, and To Inspire, through continued outreach events at both local and global levels.



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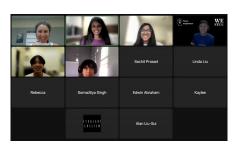
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RobotX 2022



Team Inspiration tied 1st place in Design Presentation, 1st place in Team Introduction Video, and 2nd place in Design Documentation at the RobotX competition. Team Inspiration was the first team with grade school students to compete in this college graduate level of robotics competition. Awarded \$5,500 and a handcrafted aboriginal art with RoboNation RobotX 2022 theme.

SWENext



Through Team Inspiration's very own SWENext chapter, WE STEM, the team organized an event in October of 2022. Women engineers from Qualcomm were able to speak to numerous students who aspire a career in engineering, business, and STEM.

Recognition

Team Inspiration's Coach Alex Szeto received the Outstanding Engineering K-12 Educator Award from the San Diego County Engineering Council.

Upcoming Events

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- ★ SASE West Regional Conference
- ★ San Diego Festival of Science & Engineering Northrop Grumman
- ★ Northrop Grumman robotics training outreach
- ★ Assist UCSD COSMOS class
- ★ USD STEAM academy outreach for underserved communities
- ★ Fleet Science Center outreach
- ★ Robotics training at Manna's Day Care
- ★ International teaching through FIRST Global
- ★ Team open house



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2022 Highlights

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- \star RoboSub Sim, a computer simulator created by the team for autonomous underwater vehicles development, received the 2022 Outstanding Engineering Project Award from San Diego **County Engineering Council**
- Co-hosted an official FIRST Tech Challenge (FTC) competition with hundred plus participants in January 2022
- Mentored multiple FTC teams at Team Inspiration's Lab including \star starting a new team in the bay area.
- Three team members were summer interns at Northrop Grumman. Four other team members interned with the FBI, Google, ModalAl, and tinyvision.ai. One member was an intern with The University of Texas in conjunction with NASA on the Climate Disaster Preparedness team.
- The team was featured on CBS8 News' Innovate 8 segment \star
- Hosted the 11th annual First Lego League scrimmage \star
- \star Hosted robotics training at Manna's Day Care summer camp for 40+ students with Team Spyder
- Supported the University of San Diego's STEAM academy
- \star Partnered with FIRST Global to teach students in Benin, Ecuador, Paraguay, and Togo during the summer with Team Spyder
- \star Met with International Telecommunication Union (ITU) and Education representative of Malawi to discuss the country 2063 roadmap

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- Introduced robotics and San Diego to 100+ students of a technical \star school in Japan
- One team member received NCWIT National Honor recognition
- \star One high school senior team member was accepted into Caltech and two members into MIT