## Company Info

**Company Name:** Eternal  
**City:** Alexandria, Egypt  
**Organization:** Vortex Academy  
**Distance traveled to the competition:** 10819 km  
**Participation:** since 2018  
**Range of Grade:** From middle1 to senior2

## ROV Specs

**ROV Name:** Aquaside  
**Dimensions:** 55.034cm x 35.9cm x 55.592cm  
**Materials:** PMMA, PA type PLA, and Polyethylene  
**Total Cost:** 3694 $  
**Total Mass in Air:** 9.2 kg  
**Total ROV Design Person-Hours:** About 2800 hours

## Safety Features

- Smooth edges, securing Exposed bolts with cap nuts.
- Fuses are used within less than 30cm from power supply.
- All thrusters are covered with meshes that meet IP20 standards.
- Setting the compressor’s pressure relief valve at 10 bars (106 Pa).
- Color coded cables are used for power and signal transmission inside the electronics enclosure.
- Warning labels on the ROV to ensure that anyone in contact with it is fully aware of the possible hazards.

## Special Features

- For thrusters that provide all necessary degrees of freedom.
- Compact Size and light weight.
- Pneumatically actuated gripper.
- Three cameras for the vision system.
- There cameras for vision system.
- Autonomous Docking

## Mentors

- Abdalaziz Yousry  
- Asmaa Bahaa  
- Karim El-Sayed  
- Aya Esam  
- Mai Allam  
- Mazen Gemaey  
- Aly Zaituon  
- Abdulrahman Mekky  
- Adam Ahmed  
- Adam Ibrahim  
- Adham Al-Hakem  
- Ahmed Wael  
- Ali Eldin Ahmed  
- Ali Mohamed  
- Anas Hany  
- Aya El-Sayed  
- Eyad Ahmed  
- Fares Hossam  
- Hamza Mohamed  
- Hana Mohamed Aly  
- Hour Ahmed  
- Isel Karim  
- Mohamed Sameh  
- Omar Karim  
- Omar Mahmoud  
- Retaj Tamer  
- Rodayna Mohamed  
- Saif Tabouna  
- Yassine Mohamed  
- Youssef Khaled  
- Ziad Khair  
- Mechanical Engineer | CEO  
- Mechanical Project Leader  
- Mechanical Engineer  
- Electrical Engineer  
- Software Engineer | Leader  
- Software Engineer  
- Mechanical Engineer | CFO  
- Mechanical Engineer  
- Electrical Engineer  
- Software Engineer  
- Software Engineer  
- Mechanical Engineer  
- Electrical Engineer  
- Mechanical Engineer  
- Mechanical Project Leader  
- Mechanical Engineer  
- Software Engineer  
- Electrical Engineer  
- Mechanical Leader  
- Software Engineer  
- Electrical Leader  
- Mechanical Engineer  
- Mechanical Engineer | CTO  
- Software Project Leader