Spec sheet
Vortex Braininnovates
Alexandria, Egypt
1st year participating
Organizations: Vortex Co. and Brainnovate

Distance travelled to Tennessee = 10063.23 km

Special features:
- Four thrusters that provide all necessary degrees of freedom
- Compact Size and light weight
- Acrylic dome to provide better vision
- Temperature sensor
- Micro-ROV for inspecting pipes underwater
- Pneumatically actuated gripper
- Two cameras for the vision system.

Safety features:
- No sharp edges.
- Fuses are used for the main and micro-ROVs.
- Pressure relief valve is used.
- Water detection sensor to detect leakage
- All thrusters are shrouded with meshes that meet IP20 standard
- Pressure of the pneumatic system is regulated below 2 bars

ROV Specs:
- Name: Octopus
- Total Mass in Air: 14 kg
- Overall Dimensions: fits inside a 56 cm diameter circle
- Primary Materials: PMMA, PA type 6, PLA and Polyethylene
- Total ROV Cost: $1900
- Total ROV Design Person-Hours: at least 240 hours per person

Company members
- Youssef Taha | 2nd year Middle School | Mechanical CTO
- Mohahmed Ashraf | 2nd year Middle School | Co-pilot
- Mahmoud Bahig | 2nd year Middle School | Mechanical designer
- Alley El Din Ali | 5th year Elementary | Mechanical designer
- Ali Abd El Halim | 6th year Elementary | Tether man
- Mohamed Wael | 1st year High School | Electrical designer
- Malak Ahmed | 1st year Middle School | Electrical designer
- Fady Tharwat | 2nd year High School | CEO
- Yassin Abdel Moniem | 6th year Elementary | Electrical designer
- Fareeda Hossam El Din | 2nd year High School | Pilot | Electrical CTO