

Welcome

To Presentation

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I am Bassem Mahmoud
14 years old
Grade 8

introduction





Competition



Academy



Team

Boomb



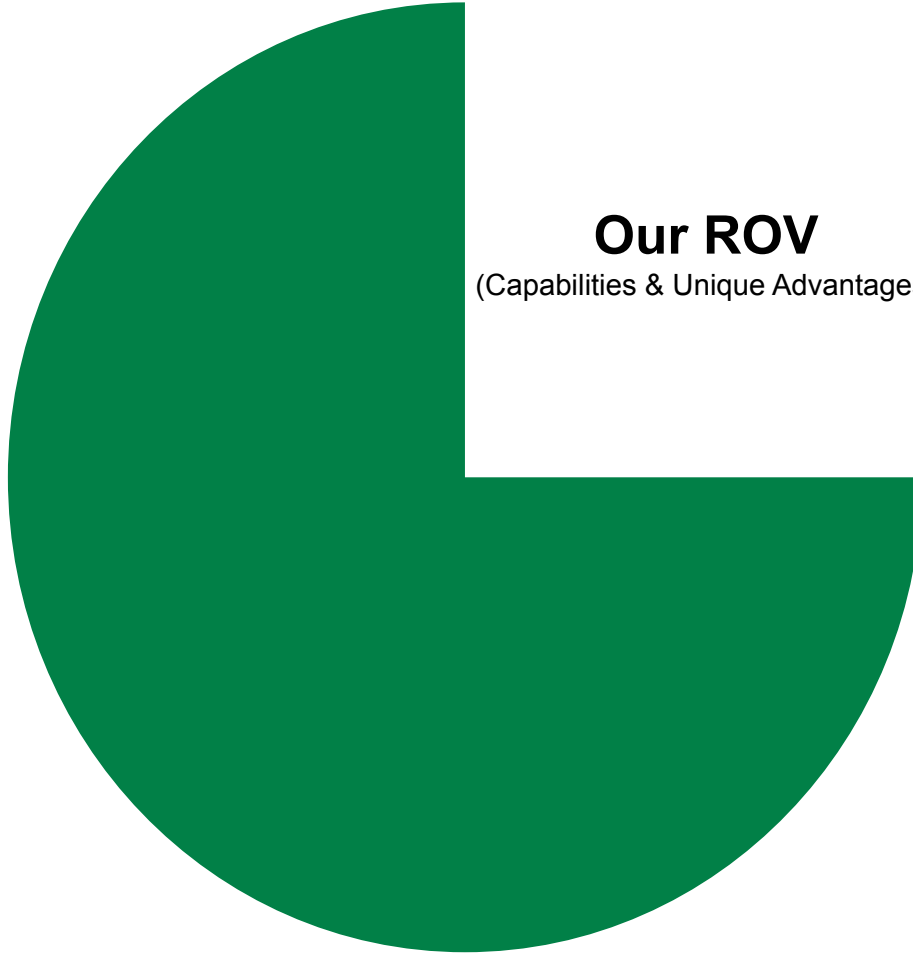
**We will talk
about**

General ROV capabilities

(in the petroleum & Competition)



**We will talk
about**



Our ROV

(Capabilities & Unique Advantages)



**We will talk
about**



**Hardware &
Tools Utilized**



**We will talk
about**

Funding Request



General ROV capabilities

(in the petroleum & Competition)

- **Pipeline & Structural Inspection:** High-definition visual auditing of subsea oil lines and platform jackets.
- **Environmental & Risk Assessment:** Monitoring marine ecosystems, detecting oil leaks, and collecting subsea data.
- **Subsea Intervention:** Manipulating safety valves, clearing debris, and managing subsea cables.



Our ROV

(Capabilities & Unique Advantages)

- **10kg Ultra-Lightweight Frame:** High hydrodynamic efficiency designed to ensure minimal water drag and resistance.
- **GUI System:** Tailored Graphical User Interface (GUI) to streamline communication and facilitate seamless control and monitoring.
- **Transparent Acrylic Hull:** High-grade optical clarity enabling unobstructed camera visibility and direct visual inspection of all internal electronics and components.



Hardware & Tools Utilized

Mechanical

Electrical

Software



Mechanical

- Aluminum Extrusions
- Buoyancy Foam
- Air Compressor
- Gripper
- Motors
- Acrylic Waterproof Enclosure (Hull)
- O-rings & Waterproof Seals
- Pneumatic Solenoid Valves



Electrical

- **Electrical Wiring & Connectors**
- **Cytron Motor Driver**
- **Thrusters Cable**
- **Power Supply**
- **USB Cables**



Software

- **Arduino Mega**
- **Raspberry Pi**
- **Robo Cameras**
- **GUI System**
- **Depth & Pressure Sensor**

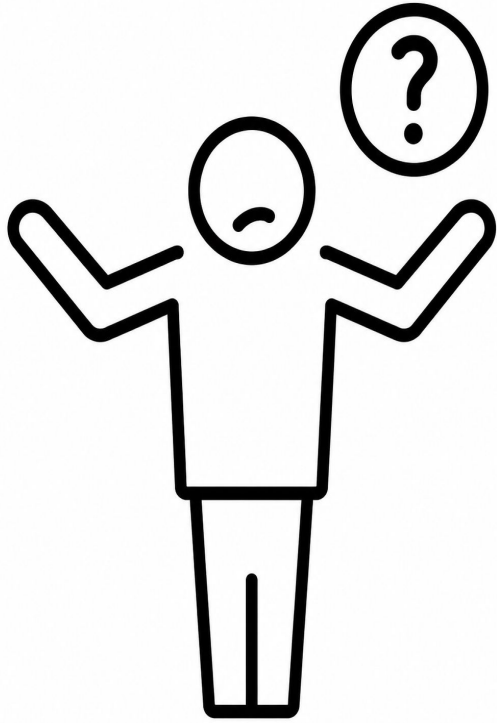


Funding Request

Based on this financial assessment, the Vortex Enigma team formally requests a primary sponsorship from PMS to fund the travel and logistical expenses for our 6-engineer team to represent Egypt at the MATE ROV 2026 Global Finals in St. John's, Canada.

This support is more than a financial contribution; it is a direct investment by PMS in empowering a new generation of Egyptian engineers who possess the hands-on expertise to operate and develop ROV technologies, which represent the core of your offshore operations





**Can I know your Sponsorship
Value ???**







Any questions

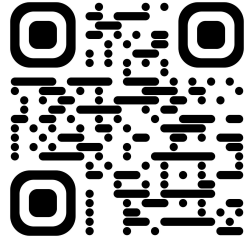


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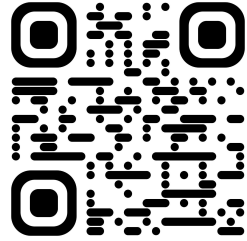
My CV, Travel Cost & Website



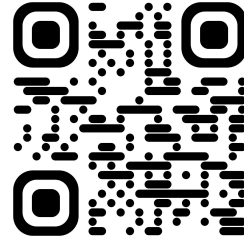
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Travel Cost Sheet



My CV Sheet



Website





Thank you for listening

