### Returning Team | 12th Time MATE

COMPANY NAME: EPOXSEA

## ROV NAME: WAHOO

Total student-hours to design & build: >1200 hours

# 1 8 Thruster Propulsion

Coupled with a stable control system, ensures precise, uniform movements across all axes at a consistent speed.

## 2 Structural Buoyancy

The frame contains calculated amount of air to achieve near-neutral buoyancy, requiring only minor adjustments for optimization.

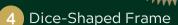
## 3 Modular Manipulator

Modular Frame design rationale, which prioritizes adaptability and customization. Manipulator can be mounted flexibly without constraints on position or height.



Length x Width x Height Size: 40 cm x 40 cm x 50 cm <u>SAFETY FEATURES</u>

### 4



Easy to repair and modify while offering stability and user-friendly controls that cater to operators of all experience levels.

### 5 Flawless Switchable Core Control System

With cameras on all sides and a dynamic control system, offers versatility beyond the traditional front-focused design.



Leveraging ROS2, open-source framework used for robotics applications, enables precise and efficient underwater navigation.



No Sharp Edges Thruster hexagonal guard

Waterproofed Circuits before Testing cer nal

Company Name: EPOXSEA

School: The Hong Kong University of Science and Technology



<u>CEO</u> LI Chi Kin (Year 2, COMP)

<u>CFO</u> NG Hau YI Chloe (Year 1, Engineering + AI)

<u>CTO</u> TANG Lok Hang (Year 1, Engineering + Al) <u>Safety Officer</u>

ZHENG Yiqi (Year 1, Engineering)
Pilot

KHAIDAR, Orazkhan (Year 2, ELEC)

<u>Supervised by</u> Dr. WOO Kam Tim <u>LEUNG Chu</u>n Yin





#### <u>Software Engineers</u>

YIP Chi Ho (Leader, Year 2, COMP) CHAN Tak Ming (Year 3, COMP) CHI Ting-hsuan (Year 3, COMP + ELEC) TSAI Yiu Ki (Year 2, COMP) ZHANG Tin Yau (Year 2, COMP) **Hardware Engineers** 

SONATA Joshua Elnathan (Leader, Year 3, ELEC) HONG Jiarong (Year 2, ELEC) JANIUS Erick (Year 2, MECH) KUO Chen-chieh (Year 3, ELEC + COSC)

LEE Ka Hin (Year 1, CHEM) LEE Sze Chun Martin (Year 2, ELEC)

#### Mechanical Engineers

HUI Kan Lap (Leader, Year 2, ISD) LCHAN Ho (Year 3, ISD) KWOK Wing Lam (Year 3, MECH + AI) LAI Pui Yin (Year 1, Engineering) LAM Chun Ho (Year 3, MECH) MUI Jessye (Year 2, MECH) NG Shing Yung (Year 2, CIVL) WONG Chin Ching (Year 2, CIVL) YANG Shi Long (Year 2, ELEC)

#### <u>Business</u>

WONG Wing Him (Leader, Year 3, ELEC) TCHEN Wai Yan Grace (Year 1, Engineering + AI) TAM Siu Ho (Year 2, ELEC) TANG Justin Kit Hang (Year 2, WBB)



Home State: Hong Kong



Distance Travelled: 12000km