

# Pasadena City College Lancer Lumineers Specification Sheet 2024



“Hydra”

## Company Info

### Location

Pasadena City College  
Pasadena, CA, United States

### Traveled

3540 km

### Returning Team

3rd year participating in MATE ROV



## Team Members

### Mechanical Team

Thet Paing (David) Da Na....Year 3  
Pete Chayapirad.....Year 2  
Martin Leung.....Year 2  
Joya Stewart.....Year 3  
Jasmine Lai.....Year 3  
Hyacinth Ang.....Year 1  
Jonathan Beaton.....Year 3  
Roman Sanchez.....Year 3  
Eric Petrossian.....Year 2

### Electrical Team

Rene Nunez.....Year 2  
Min Pyae Thway (Jason).....Year 1  
Yukun Zhang.....Year 1  
Yi Hong (Victor).....Year 1

### Software Team

Min Aung Paing.....Year 3  
Phyo Thant (Patrick).....Year 3  
Puthyrath (Rath) Hy.....Year 2  
Ariel Reid.....Year 3  
Linn Khant Thuya.....Year 2  
Myat (Michael) Thiha.....Year 2  
Simon Wu.....Year 3  
Jocelyn Zhu.....Year 2

### Advisors

Thomas Thoen  
Doug Foster  
Yu Chang-Chang Hou  
David Martinez  
Jared Ashcroft

## Safety Features

### Custom 3D Printed Thruster Shrouds

Protects the device and user from injury

### Bottom-Side Kellems Strain Relief

Prevents cable damage and electrical failures

### Toggleable Thrust Power

Offers controlled power management & protects device from overheating

## Special Features

### Integrated Xbox Controller

Provides for friendly-user interface

### Object Detection

Inspects the condition of underwater structures

### Rotating Claw Arm

Provides additional mechanical freedom

### Adjustable Camera Angle

Enhances underwater vision

## ROV Specs

### Dimensions

Length: 66 cm  
Width: 46 cm  
Height: 37 cm

### Build Cost

\$4170

### Mass

11.5 kg

### Build Time

600 hours