#### Team Profile

**School name:** City University of Hong Kong  
**Team name:** Shadow of the Dragon  
**Home state:** Hong Kong SAR  
**Distance travelled to the international competition:** 9263 km (5756 miles)

#### ROV Specifications

**ROV name:** Loihi Vanguard  
**Total cost:** $1,700 USD  
**Construction Material:** PVC  
**Dimensions:** 70*45*40 cm  
**Depth Rating:** 5 m  
**Total System Weight:** 10 kg  
**Speed:** 2 knots  
**Power Supply:** 48V, 40 A  
**MCU:** PIC16F876A

**Main Camera:**  
Location: Front End  
Features: Wide Angle & High Resolution

**Second Camera:**  
Location: Rear End  
Features: Inbuilt Lighting System

**Propulsion:**  
Propellers: 100 mm diameter  
No. of thrusters: Three  
Power Rating: maximum 580 Watts

**Onboard Tools and Sensors:**  
Water pump driven collectors  
4-joint high torque manipulator  
Hydrophone  
Temperature sensor  
Digital Compass

**Control Console:**  
Communications protocol: RS 232  
Case: Waterproof Acrylic  
Control panel: Laptop PC Joystick

**Safety Features:**  
2-layered water proof box  
Fuses  
Circuit Breaker  
Watchdog LED

#### Special Features

- Powerful Propulsion  
- Rigid Frame  
- Versatile Robot Arm  
- 2 Cameras  
- Flexible Joystick Control  
- 3-D Interface  
- Digital Compass  
- Frequency Detector  
- Thermometer

#### Team Profile

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Status</th>
<th>Grade</th>
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<tbody>
<tr>
<td>GAO Jiabei (Gabriel)</td>
<td>Team Captain</td>
<td>returning</td>
<td>BEECE Year 2</td>
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<tr>
<td>GUO Hao (Jason)</td>
<td>Electronics</td>
<td>returning</td>
<td>BEECE Year 2</td>
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<td>MA Yuting (Wolfina)</td>
<td>PCB fabrication</td>
<td>new</td>
<td>BEECE Year 1</td>
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<td>TONG Huachen(Bobby)</td>
<td>3D Interface</td>
<td>new</td>
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<td>ZHANG Cheng (Gus)</td>
<td>Electronics &amp; Software</td>
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<td>BEECE Year 1</td>
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<td>CHU Hung Wing (Peter)</td>
<td>3D Solid Works</td>
<td>returning</td>
<td>MEEM Year 2</td>
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<td>YAHYA Yasir Ali</td>
<td>Payload installation</td>
<td>new</td>
<td>BEECE Year 2</td>
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</tbody>
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Team photo taken on 26 May, 2010