

## COMPANY SPEC SHEET

### CAPTAIN



Figure 1: CAPTAIN  
(Photo: Natalie Mitchell, 2025)

**Cost: \$3408.26**

#### Size:

49cm x 31cm x 43cm

**Weight:**  
10.35kg

**Team Hours:**  
280 hours

#### Safety Features:

Some safety features of our ROV include custom 3D-printed shrouds on all thrusters to prevent injury and meet IP20 standards, clearly labeled pinch points on moving parts like the claw, a sealed electronics housing with epoxy-potted wire exits for waterproofing, sanded frame edges for safe handling, and active tether management to reduce tripping hazards and improve control during operation.

#### Special Features:

Our ROV is powered by 6 T200 thrusters from Blue Robotics, chosen for their power output and reliability. They are arranged in a way where CAPTAIN can move in all axes of rotation, adding the ability to pitch up, down, and roll left and right.

#### Distance Travelled:

3,765 km

from St. John's,  
Newfoundland, Canada

Figure 3: HEART Innovators Team Photo.  
(Photo: Cole Murphy, 2025)



Back Row, Left to Right: Michael O., Frank C., Kenneth Le., Noah M., Peyton C., Ben E., Madison D.  
Front Row, Left to Right: Waffa Z., Sophia Z., Natalie M., Saige N., Junjie M., Abbey J.

#### History of Participation:

Returning team with 3 years of MATE competition experience.

#### Members:

**\*Ben Evans**  
CEO - Grade 12

**\*Natalie Mitchell**  
COO - Grade 12

**\*Sophia Zhang**  
Design & Fabrication Lead - Grade 11

**\*Kenneth Le**  
Software Lead - Grade 12

**Abigail Janes**  
Safety Lead - Grade 11

**Michael Osborne**  
Design & Fabrication Assist - Grade 10

**\*Peyton Cashin**  
Software Assist - Grade 12

**Saige Navarro**  
Graphic Design Assist - Grade 11

**Madison Drover**  
Design & Fabrication Assist - Grade 10

**Junjie Mou**  
Software Assist - Grade 11

**\*Waffa Zahralyn**  
Graphic Design Assist - Grade 12

**\*Frank Chen**  
Software and Design &  
Fabrication Assist - Grade 12

**Noah McDonald**  
Software Assist - Grade 11

**Vidya Chedella**  
Marketing Assist - Grade 10

\* = Returning team member