



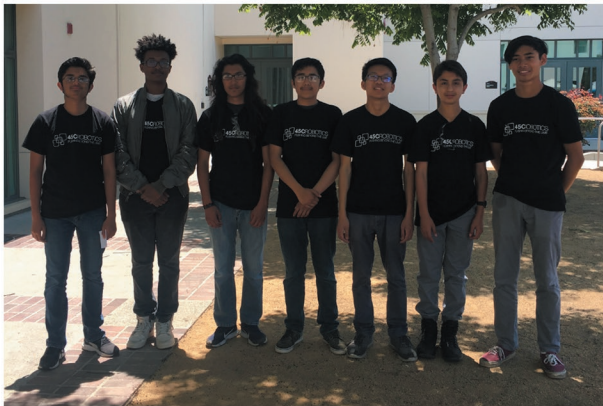
**45CROBOTICS**  
PUSHING BEYOND THE LIMIT

## 45C ROBOTICS

Carson, California

Distance to International Competition - 2,325 miles

EST. 2015



### TEAM MEMBERS

**Jiajer Ho '19** - CEO & Electrical Lead

**Frank Chaqueco '20** - Design Lead & Electrical

**Isaac Addis '19** - Software Lead

**Alexander Vazquez '21** - Software Engineer

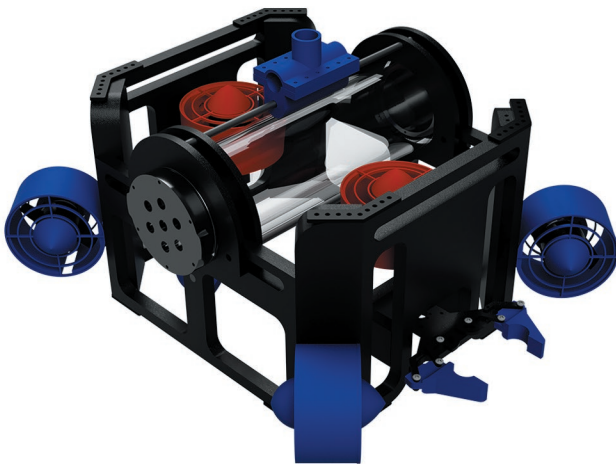
**Matias Vergara '22** - Mechanical Engineer

**Jared Arbolario '22** - Mechanical Engineer

**Aarya Topiwala '22** - Electrical Engineer

**Kyle Garcia Takata '21** - Finances & Publications

**Sandra James** - Mentor



Name of Vehicle: **Nautilus**

Manufacturing Cost: **\$2,565.21**

Weight: **5.6 kg**

Primary Material: **High Density Polypropylene**

Dimensions: **36 x 28 x 25 cm**

Hours to build: **300 hours**

### Safety Features

IP 20 protected motor guards

25 amp in line fuse

Short circuit protection

Over voltage protection

Leak and humidity sensors

50V surge protection for 100ms

Current Limit ESCs

### Special Features

Six custom printed circuit boards

Reliable serial communication system

Custom 3D printed motor mounts

Custom Graphical User Interface (GUI)

Rotatable claw and high torque front claw

Six brushless motors with vector movements

5 axes of motion including tilt and lateral