

2017 GARRETT COLLEGE Project Kraken TEAM

COMPANY SPECS

Company Name: Project Kraken

Location: McHenry, MD, USA

Distance to Competition: 4,023.68 km

Company History: Fourth year in operation.

Current participants include two prior year members and one new member. Company placed 12th in the 2016 Explorer class at NASA's neutral buoyancy facility.



From left to right: Garrett Owens (SW), Scott Brenneman (EE), Dallas Brenneman (CEO, ME)

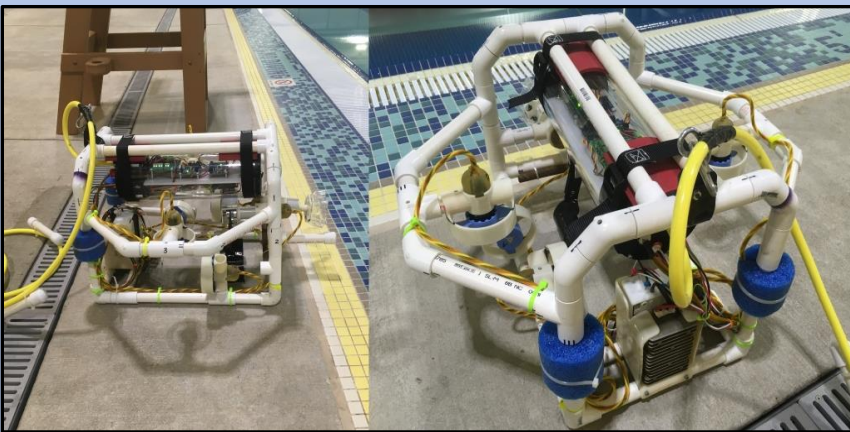
Company Member Information

Garrett Owens – Programmer/Software Engineer, Mission Pilot (Freshman) NEW MEMBER

Scott Brenneman – Electrical Engineer, Mission Co-Pilot (Sophomore) RETURNING

Dallas Brenneman – Mechanical Engineer, Mission Tether Control (Sophomore) RETURNING

ROV SPECS



Kraken III ROV. 100% New this year

Name: Kraken III

Total Cost: \$2,000 USD

Total Build Time: 1200 hours

Weight in Air: 9.5 kg

Dimensions: 55cm x 53cm x 35cm

Safety Features: Anderson connectors are used on the 48 volt power line; a 20 A in-line fuse, 13 cm from the main power connection point; a manual circuit breaker switch inside the control box; all ROV wire ends and sensitive electronics are either enclosed in a pressure housing, rated for 100 meter depths, or epoxied to prevent short circuits and electrical failure; the thrusters and electronics housing are mounted within the protection of the frame; all thrusters are shrouded; and strain relief is used at both ends of the tether.

Special Features: **100% New ROV.** Fully epoxied (custom) brushless motors, tilting analog camera, custom designed manipulators, ethernet-over-powerline communications, Bluetooth receiver module for radio frequency identification, and neutrally buoyant tether.