



Autonomous Boat Project

Project Advisors: Professor David Reinkensmeyer



UCI Samueli
School of Engineering

BACKGROUND

- ▶ The Microtransat Challenge encourages teams to cross the Atlantic Ocean autonomously
- ▶ Over 30 teams have attempted and failed to meet the challenge
- ▶ Autonomous technology will be the next generation of transportation

GOALS & OBJECTIVE

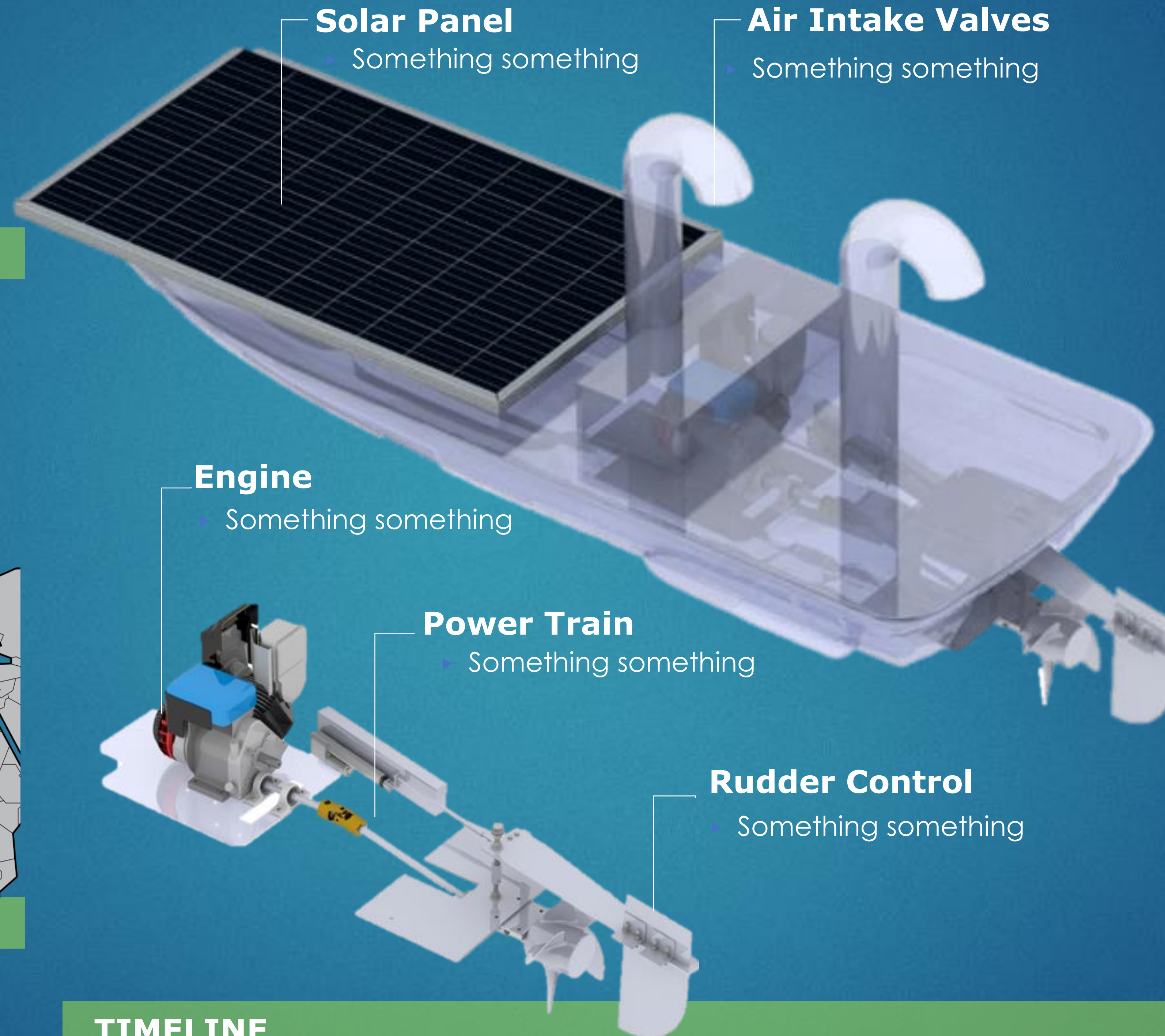
- ▶ Design and develop an autonomous boat capable of
 - ▶ Navigating itself across the Atlantic Ocean
 - ▶ Maximizing fuel and energy efficiency
 - ▶ Utilizing multiple energy sources
 - ▶ Featuring fail-proof computer systems



REQUIREMENTS

- IMPORTANCE ↓
- MOST
- ▶ Constant Satellite Communication
 - ▶ Energetically Autonomous
 - ▶ Solar Power Generation
 - ▶ Engine Efficiency
- LEAST ↓

INNOVATION



TEAM



From left to right: Mercedesz Aquino, Connor Kingman, Francisco Vega, Chris Bennett, Kevin Kuan, Sam Eubanks, Justin Ringhofer, Phillip Friedman, Jonathan Tang, Jared Smith, Patrick Canler, John Ellington, and Nick Parks

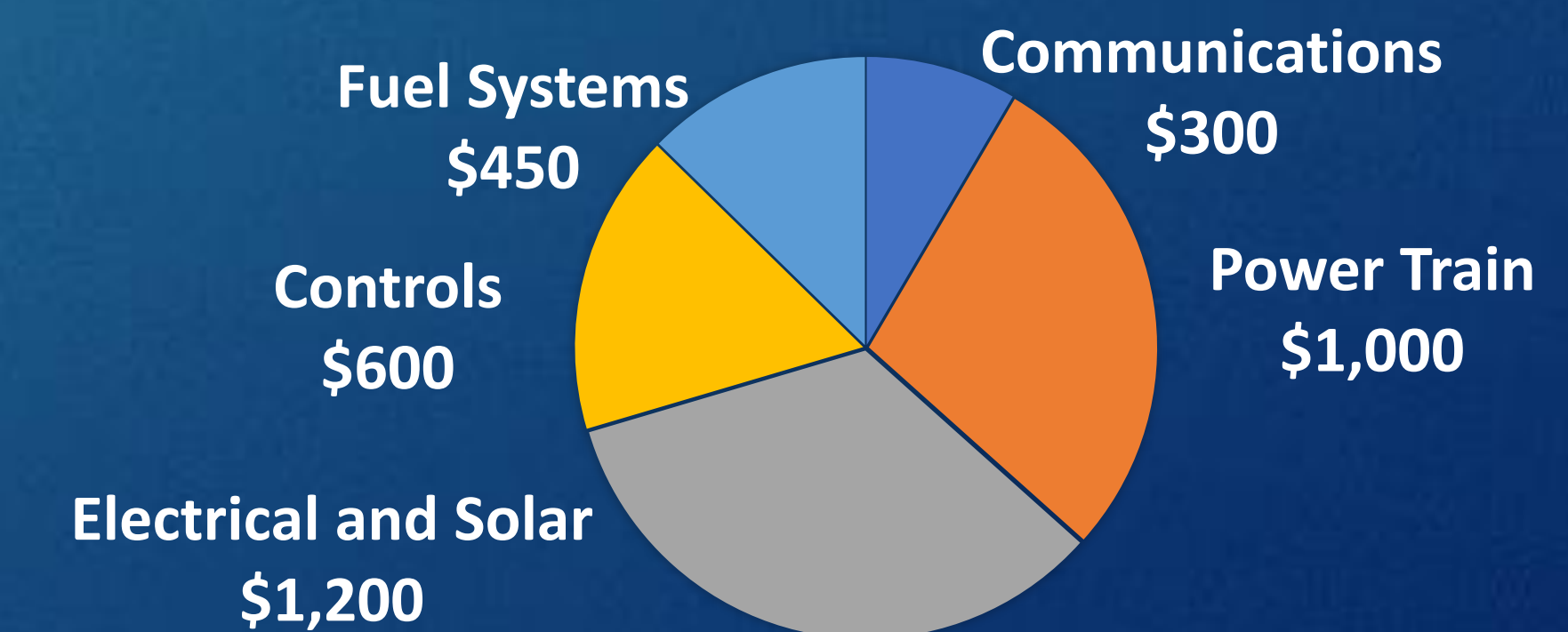
CURRENT STATUS

- ▶ Finalized program for autonomous navigation
- ▶ Implemented fuel systems, control systems, and drive train
- ▶ Installed steel cover for boat and engine

NEXT STEPS

- ▶ Complete water intrusion
- ▶ Assess and refine the boat design based on Catalina Trip
- ▶ Compete in the Microtransat Challenge across the Atlantic

BUDGET



CONTACT INFORMATION

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TIMELINE

