Cornell University Autonomous Underwater Vehicle

Erin Fischell

Team Leader

CUAUV
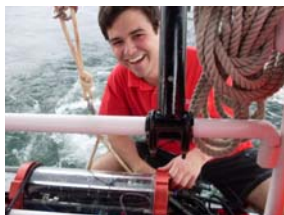
CU AUV — Cornell University Autonomous Underwater Vehicle
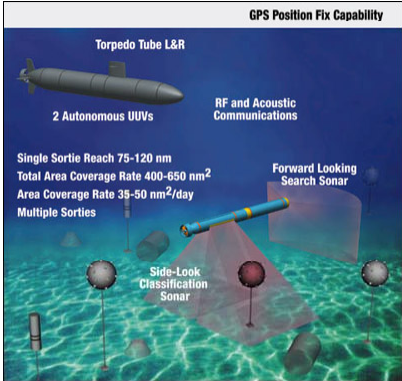
Applications for AUVs

Oceanographic Research

Military

Homeland Security

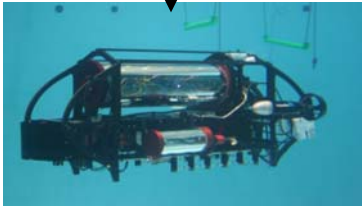Offshore Industry

CU AUV — Cornell University Autonomous Underwater Vehicle

CUAUV History

- Founded in 1999
- BRAIN: Big Red Autonomous Intelligent Navigator
- 8 Vehicles, #9 in progress
- 10 Competitions
- 2 Competition Wins: 2003 and 2009
- 8 Static Design Wins

CU AUV   Cornell University
Autonomous Underwater Vehicle

CUAUV Culture

- Recruiting

- Design focus

- Project Ownership

- One year design cycle

CU AUV   Cornell University
Autonomous Underwater Vehicle

Team Composition

- 43 Students
- 3 colleges
- 16 different majors
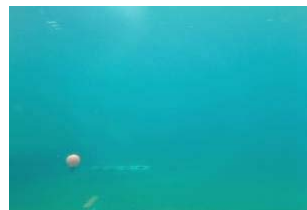- 10 engineering majors
- Equally distributed by year

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Autonomous Underwater Vehicle

Design Cycle

- Less than one year: August-May

- Requirements set early

- Three levels of design reviews

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AUVSI/ONR AUV competition

Visual Mission Elements

Research in Cayuga Lake

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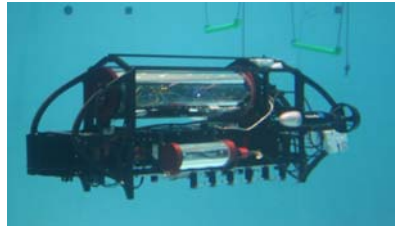
My team experience

Proteus: 2006-2007

Triton: 2007-2008

Nova: 2008-2009

Akula : 2009-2010

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Questions?