IITG Project Outcomes Form - Report Outcomes : Entry # 890

Name of person reporting outcomes

Robert Kidd

Email

rkidd@sunymaritime.edu

IITG Project Title

2019-Maritime-Kidd-Autonomous Vehicle

Have you applied for, or received additional funds? (choose all that apply):

- Have applied for additional IITG funds to extend this project
- Have applied for campus funds to support this project

In 1-3 sentences, how would you describe how your project helps advance the SUNY mission?

The project increases quality of education at the institution while creating a low-cost option for other programs to create their own alternatives. This program additionally highlights the need to address and protect marine resources.

Due to Covid-19, funding has dried up this year. Hopefully more funds will be available in future from different sources.

1st Choice:

Connected Learning Models

Connected Learning Models

- Active Learning

2nd Choice:

Instructional Technologies

Instructional Technologies

- Artificial Intelligence

3rd Choice:

Instructional Technologies

Instructional Technologies

- 3D Printing

IITG Project Outcomes Form - Report Outcomes : Entry # 890

What recommendations would you make to scale-up or share your project more broadly (within an educational sector, or perhaps SUNY-wide)?

I would recommend securing commitments for 2 years. It is a long learning process to extend our work, so getting people to sign on for 2 years will help with continuity.

Not interested?

Unsure at this time

Do you wish your current abstract to be used?

No

If you wish to re-word the abstract to reflect updates or outcomes, you may do so in this text box (please keep it brief – less than 150 words - you can expand on this in your files and links)

Autonomous (i.e. self-driving) vehicles are set to become the great disrupter of our time. In this project, we will work with undergraduate Engineering and Marine Environmental Science students to design, build, and use small unmanned vessels. Students will be involved in all phases of production, including design, fabrication, assembly, algorithms and coding, and deployment. The vessels will be outfitted with probes to collect water quality data such as temperature, pH, and dissolved oxygen. Marine Environmental Science students will deploy the vessels in the East River, adjacent to our campus. These students will then use the collected data to conduct research on East River water quality. Furthermore, we will provide an additional vessel to a partner maritime academy in the Bahamas, thus enabling their students to collect water quality data, without needing specialized knowledge of building unmanned vessels.

File One Upload and Brief Description

These files are for the project are located on GitHub here:
https://github.com/bokidd/AG-0_Arduino
https://github.com/bokidd/AG-0_CAD
https://github.com/bokidd/AG-0_PiCode

File Two Upload and Brief Description

The website for the project is a work-in-progress:
https://bokidd.github.io/AG-0_PiCode/

Project Website Address (Hyperlink 1)

https://bokidd.github.io/AG-0_PiCode/

Hyperlinks to journal articles or campus/local/national press releases describing your project

https://peer.asee.org/34142

Consistent with the RFP, you must indicate which Creative Commons license you intend to use.

Attribution License