I am happy to recommend MIDN 1/C Gregory Burgess for the MIT-WHOI Joint Program. I have known Mr. Burgess for 2 years; he was an outstanding student in my ES200 (Introduction to Systems Engineering) section covering embedded microcontrollers, C and Matlab. I am also familiar with the program, as I was a Joint Program student in AOPE.

Mr. Burgess stood out for driving his team’s Pokemon video game project to develop graphics and use object-oriented techniques, Matlab classes, and GUIs. In EW456 (Autonomous Vehicles) and EW413 (Digital Control Engineering), he is working in Python and ROS. For a design experiment I assigned, I was impressed by his creativity in developing a swivel turret firing ping pong balls, using minimal materials.

Our department focuses on robotics, controls, and autonomy. Since taking my class, Mr. Burgess has worked on a small autonomous vehicle with a color sensor, Hall-effect sensor, and ultrasound rangefinder. It navigated a course, avoided an obstacle, and detected “mines” under the course. Mr. Burgess also implemented a ship’s autopilot heading control as part of our honors linear systems class.

Aside from classroom experience, Mr. Burgess has been underway in USS ANNAPOLIS (SSN-760). He was part of the sonar division and stood watch under instruction as helmsman/planesman, basic sonar operator, and in fire control. This practical experience with undersea warfare could benefit navigation projects in the Deep Submergence Lab or at sea on a research vessel.

Mr. Burgess has proven his commitment to research and will be presenting research conducted during his Summer Student fellowship at WHOI at the IEEE OCEANS Conference in Seattle, WA. Our department here at USNA fully supports him in his research endeavors. Mr. Burgess is currently working on a magnetic navigation research project under CDR Paul Frontera and is being immersed in graduate-level dynamics and filtering techniques.

Mr. Burgess is an outstanding candidate and would fit in well in the MIT-WHOI Joint Program

Very respectfully,

Dennis Evangelista