Montgomery College Computer Science Student Team Wins National Competition at NASA.

The NASA Swarmathon is a challenge to develop cooperative robotics to revolutionize space exploration. Teams of students from Minority Serving Universities and Community Colleges developed algorithms for autonomous robot swarms to search and collect resources on Mars.

The challenge is organized in two separate parts, a Physical Competition where actual robots search for and collect physical cubes representing resources, and a Virtual Competition where the robots and cubes are simulated and the robots interact with a virtual environment. A team from Montgomery College under Computer Science/Engineering faculty mentor Dr. David Kuijt has spent the Spring 2017 semester learning and programming robots to compete in the Virtual Competition; Montgomery College was one of 15 teams selected to compete in the Virtual Competition. This is the second year of the Swarmathon Competition, and the first year that Montgomery College has participated.

In the two preliminary rounds of the Virtual Competition, the robots using the code programmed by the Montgomery College team collected 188 cubes, more than the combined total number of cubes collected by all nine of the other teams that managed to submit code. In the quarter finals MC's robots still performed well enough to advance but were overcoming major issues; the same thing happened in the semifinals. In the final round of the competition MC's robots managed to win by a score of 20 cubes to 16, defeating the University of Hawaii at Hilo, and winning first place in the NASA Swarmathon Virtual Competition and a $3000 prize.

The Montgomery College team is planning to celebrate their victory by signing up for the Physical Competition next year; within a few months they will be testing their code on physical robots in a segment of the campus parking lots.

From left to right: Denis Tra Bi, Suriya Iqbal, Michael Roa, Dr. David Kuijt (faculty mentor), Rebekah Newby, Shayan Taslim (standing), Denys Fedorchuk (kneeling below him), Huyen