

## **Cortland STEM Professors Engage Students in Drone Startup Pitch Contest**

Over the 2020 fall semester, Chris Badurek, Associate Professor Geography, and Janet Ochs, Coordinator of the Computer Applications Program (CAP), worked together to implement a drone startup pitch contest for students. Students from Geographic Information Systems and GPS Technology courses collaborated with two CAP 104 Computers & Society classes through virtual class sessions and collaboration times to develop business startup ideas to improve society and solve problems. Students operated in teams, conducted research, accomplished learning outcomes, and submitted proposals based on the National Science Foundation's Innovation Corps STEM entrepreneurship education model.

The proposals were presented to a panel of alumni judges and the most innovative or well-researched ideas were recognized. Startup ideas included ventures to decrease plastic in rivers, improve wildlife tracking, increase STEM education in schools, expand mapping accuracy for emergency response or delivery drivers, and fight wildfires in the western United States.

Alumni judges included Geography major and CAP minor Mary Colomaio, now GIS Specialist at Cornell University Facilities Department, Geology major Adelina Prentice, now GIS Analyst at the drone startup company DroneSeed, and Biology major Chelsea Cook, now Assistant Professor of Biology at Marquette University. The judges evaluated student pitches using a criterion of creativity, clarity of presentation, level of technical detail, and use of supporting data. After presenting their pitches via WebEx, the judges provided feedback to all the participating teams and awarded the winners. “The students demonstrated effective use of the lean startup methodology promoted by the NSF for STEM technology startups,” said Badurek, who completed three NSF Innovation Corps courses on STEM entrepreneurship during 2020.

Students in both classes reported significant learning and personal growth from engaging in the pitch contest. According to Badurek, “With the pandemic, Janet and I wanted to provide students an opportunity to collaborate and spend time with other students. We also wanted students to have fun developing their ideas and provide an opportunity to speak in front of successful Cortland STEM alumni.” In terms of collaboration, one student responded: “I was very happy with my team and how we worked together because it may have been short-lived but it made all of us better people, students, group members, and friends.”

Another of the learning goals of the pitch contest was to increase a student’s opportunity to seek creative solutions to problems. “I was very impressed with the creativity of the teams and several students blossomed when giving their final presentations to the judges,” said Ochs. Also, students added “It got me thinking outside of the box.” and “This project made me grow personally because it showed me that I too can create something, not just the famous rich people.”

Badurek and Ochs aim to continue collaboration to develop opportunities for SUNY Cortland students' growth in technology knowledge and personal development relevant to the new state of the working world.