

# STEM C<sup>2</sup> RESEARCH SUMMIT

April 21, 2017



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The students of ATHS had an opportunity to participate in Bergen Community College's fourth Science, Technology, Engineering and Mathematics Conference, the Stem C2 Research Summit and College Fair on April 21, 2017. Our school's partnership with BCC allowed us to see the many academic accomplishments of local community colleges that were invited.



The day started early with registration at the Technology Building where we received our official badges. We were treated to a complimentary extended continental breakfast. As we all gathered at the Tech 128 Conference Room with college students from other local community colleges, Mr. Luis De Abreu, the conference coordinator, welcomed all of us and introduced the keynote speaker.



We were surprised to see Mission Commander Astronaut Leroy Chiao via videoconferencing from Houston. He was the mission commander of Expedition 10 and he lived on board the International Space Station (ISS) for 229 days. It was fascinating to hear about his missions and work. He mentioned that he took over 16,000 pictures of natural disasters of the earth. It was also interesting to find out that the ISS rotates the earth every 90 minutes and they do more exercises than our basketball team. They exercise for two hours a day because of issues with lack of gravity. Students asked a few questions that covered if the missions were scary and we found out that the spacewalks were a lot of fun; however, doing inventory work was very boring but necessary. He was an entertaining, knowledgeable and inspirational speaker.

After the presentation, we had the opportunity to look at the different showcases throughout the building. Our group (Chris, Dominick and myself) went to the Aviation Showcase in room 203. Here we found two fascinating elaborate drone concepts that were presented by two of Mr. Cohen's students at BCC. The poster boards and descriptions were very professional and detail oriented.

The first concept was of a cargo drone UV-4 that would replace manned cargo airships. The student used X-plane software and created the UV-4 simulation. It was very realistic looking.



The other concept was using drones to do detailed 3-D mapping. The poster board had a comprehensive view of the college campus in 3-D. We thought these two design concepts were well thought out and can have real-life applications.

Keeping with the theme of our program, we were fed another complimentary lunch.

We are fortunate that ATHS gives us the opportunity to see and participate in more than the basic day-to-day school curriculum activities. We would also like to thank Mrs. Araya, our college Chemistry professor, for inviting and guiding us through this informative event that helps opens our eyes to potential future STEM opportunities.