

SPRING 2017

RPI ENGINEERING AMBASSADORS

ALUMNI NEWSLETTER

Alumni Updates

Adriana Rojas

Background: Adriana was one of the very first EA's, having joined in Spring 2011. Her signature presentations include Thermoelectric Devices with Michelle Decepeida initiated through her research work with Dr. Diana Borca.

Hello Engineering Ambassadors!

I graduated with my B.S in Chemical Engineering in 2012, and I started my PhD studies at the University of California Berkeley in August of that year. I study polymer electrolyte systems for lithium metal batteries, and I have focused on the synthesis and characterization of the system's morphological and ion transport properties. My last two publications describe these studies, and I am moving forward with collaborations and further studies on my system. Some of my favorite experiments so far include using the beamlines at the synchrotron 10 minutes away—x-ray scattering and computerized tomography (CT scanning) using high energy x-rays. I'm also currently focusing on dynamic NMR experiments to measure the diffusion constant of lithium ions in my polymer electrolyte systems. During my undergraduate career, I enjoyed learning new laboratory techniques, and in graduate school, I have had the opportunity to continue my education through the use of the many cutting-edge research facilities in the bay area. I continue to present my research at conferences and at group meetings, just as I had done in EA. If anyone has any questions about graduate school or living in the bay area, feel free to get in touch with me! Outside of the laboratory, I volunteer with other graduate students in the STEM field to foster professional development programs for graduate students and to provide outreach to undergraduate and high school students. I also like to explore the bay area hiking trails (plenty!) and its food scene. Happy New Year everyone!

-Adriana



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MEMBER SPOTLIGHT



Mallory Gordon

Major: Mechanical Engineering

Hometown: Oswego, NY

Presentations: Snowboarding, Wind Energy, Iron Man, Structures, Water Filtration, Digital Sound, Wearing Polymers

2017 Summer Internship: I will be working at UTC's Pratt and Whitney at their Middletown, CT location. I will be on their Mechanical Systems Design Team in the Cold Section Module Center.

Favorite part of EA: My favorite part of being an EA is surrounding myself with other intelligent and outgoing engineers. It's a unique academic based club environment that doesn't involve boring work or boring people. We're genuinely a fun group of students who are improving ourselves professionally, while passing on our passion for engineering to young kids.



Vladimir Ramos

Major: Aeronautical/ Mechanical Engineering

Hometown: Bronx, NY

Presentations: Humanitarian Logistics, Wind Energy, Jet Engines

Research at RPI: Design Flight Array with Professor Sandipan Mishra. The research consist of studying fully autonomous multicopter configurations designed to carry loads.

2017 Summer Internship: I will be working at Pratt and Whitney in their project discipline department.

Favorite part of EA: My favorite part about EA is being able to come back home after a long day of presenting and knowing that I impacted, even if a little, the young students' perspective on engineering and hopefully I've motivated some to go into engineer.



Troy Prep

A handful of EA's started a program with the local Troy Prep Charter School in the fall of 2016. The engineering ambassadors visit the school during their afterschool STEM club which includes 5th-8th graders. The goal is to create around 6 presentations for 6 visits that align with the school's science curriculum to show students how the content they're learning applies to real world applications.

EA TRIP TO THE BRONX

This winter break the Engineering Ambassadors had the privilege to travel down to the Bronx and spread their knowledge of STEM to the boys and girls of St. Raymond High School and Middle School in a one week long school visit. The trip was spearheaded by our own Vladimir Ramos. All the EA's had a great time and Vald had this to say about the trip,

"I wanted to set up the Bronx visit to my homeschool because I felt that growing up I had no clue as to what engineering meant. I wanted the minority kids in my neighborhood to not be afraid of pursuing engineering because of all the stereotypes that the engineering degree has such as needing to be a genius in math and science in order to be successful. The visit itself was amazing. After the presentations the students were asking questions that I've never heard on a visit before such as: 'How was the college application process for you', 'How much do engineers make,' 'What was your hardest class.' The students were also really engaged and after one of my Jet Engines presentations one of them told me "You make engineering sound so cool" that is probably my proudest moment being an EA."

Along with all the school visit fun, our EA's also found time to enjoy New York City and visit the Empire State Building. During this week long school visit we were able to reach about 1,700 students!

