

FALL 2017 ISSUE

RPI ENGINEERING AMBASSADORS

ALUMNI NEWSLETTER

A Letter From Our E-Board

My name is Tyler Graf, and I am the current President of the RPI Engineering ambassadors. I am a Co-terminal student pursuing a master's degree in Biomedical Engineering, and am excited for the event filled year to come.

As an organization, we are working to continue expanding our outreach efforts with the addition of 26 new Engineering Ambassadors whom recently returned from conference at the University of Connecticut. Two of these EAs saw the Engineering Ambassadors present while still in high school!

These new EAs will join senior EAs to help continue expanding our outreach efforts to local schools as well as support programs at Troy Prep and Watervliet. All with the common goal to inspire the next generation of engineers. I am also excited to watch our EAs grow, mature, and bond throughout the year while helping others to discover their passion.

As an organization, we also hope to strengthen our bond with alumni. We would love to provide resources to help you continue your outreach efforts while hoping to draw on your resources to help mentor, guide, and support our current EAs and the engineers of tomorrow.

Lastly, I would like to thank all of you for your past contributions to the organization. Without you and your efforts the organization would not be what it is today! I would like to personally invite you to our Alumni weekend event for a buffet dinner that will be held on Saturday, October 14 at 5:00 – 7:00 pm at The Design Lab JEC 3232, so we can all relive our most memorable moments within the RPI Engineering Ambassadors organization. I hope to see you there!

Sincerely,
Tyler Graf



In This Issue

- Member Spotlight
- Conference
- Recruitment
- Alumni Updates

MEMBER SPOTLIGHT



Leslie Chase

Major: Electrical, Computer & Systems Engineering

Hometown: Holden, MA

Presentations: Future of Flight, Wind Energy, Watervliet STEM Raspberry Pi Program

2017 Summer Internship: This past summer I worked at Microsoft as a Software Development Engineer and a Project Manager. I specifically worked on new features for the default home page and new tab page for the Edge browser. Next summer I will be returning as an Electrical Engineering Intern, working for either Surface, Hololens, or Xbox.

Favorite part of EA: My favorite part of being an Engineering Ambassador is showing students their potential. I developed and taught a long term program at Watervliet, NY. Most of these students came in hesitant about their ability, but they were excited to learn, and they exceeded expectations when coding and wiring their final project. This school district had few STEM opportunities, and it was amazing to see students walk away with such a new passion.



Luke Dvorozniak

Major: Mechanical Engineering

Hometown: Cape Elizabeth, ME

Presentations: Advanced Bio-Manufacturing, Global Positioning Systems, Jet Engines

2017 Summer Internship: I worked at Pratt and Whitney in East Hartford, CT in their hot section engineering section. I was in the durability department which works on cooling the engine's turbine blades and vanes in the high and low pressure turbines of the engine. My group was in charge of designing cooling passages to make sure the blades and vanes met their life requirements and would not melt.

Favorite part of EA: My favorite part of being an EA is working with other passionate engineers on presenting topics that they want to educate the world about. It is one of the greatest feelings to inspire a young student to want to learn about or work on something you care about when they're older. Many people, especially kids, don't know the types of projects engineers work on, and the role Engineering Ambassadors plays to educate them is immensely important.

Recruitment

This spring we have recruited a record number of 26 new Ambassadors. They span across 8 different majors from many different areas of the country, including 2 junior EA's who were direct impacted by Engineering Ambassadors during their high school careers. We had a record setting number of applicants this year and we hope to grow that number in the coming years. Congratulations to RPI Engineering Ambassadors newest members!



EA CONFERENCE

On September 15th, 23 members of the newest EA cohort and 5 senior EAs traveled with the Science Ambassadors to the University of Connecticut for the annual regional EA network conference. The junior EAs had the opportunity to see presentations from other schools and learn from various styles throughout the network. They also had the opportunity to critique peers which helped put the junior EAs on the opposite side of the table and critically think about effective presentation styles without the tunnel vision that comes from working a long time on one presentation. Mallory Gordon and Amy Bredes were part of the teaching team that met with Michael Alley Friday morning to finalize details for the presentations given to the junior EA's Friday afternoon. Tyler Graf, Denver Overend and Leslie Chase were mentors for several teams across schools. After 2 days of intense presentation workshops, the RPI EAs decided to relieve some stress by taking a walk to UConn's famous Dairy Bar for a treat.



ASEE CONFERENCE

The American Society for Engineering Education is a nonprofit organization of individuals and institutions committed to furthering education in engineering and engineering technology. Every year, they hold a conference with different exhibits and presentation of research in engineering education. As such, our RPI research group on measuring student response to the pathfinding robotics presentation/activity submitted a paper discussing the promising results from school visits to Berlin Junior/Senior High School (in Berlin, NY) and Lansingburgh High School (in Troy, NY). This paper was accepted for publishing, and we were given the opportunity to present our paper at the conference. Matthew Jahnes and I went to Columbus, Ohio to present, and we got very positive responses. Also, we were able to attend other presentations and exhibits, from which we were able to gather ideas for how to improve our activities, including new approaches to embedded control, how to improve our study with pathfinding robotics, and the idea of “game-ification” of activities.



-Written by David Glowny, BS '18, Computer Systems Engineering

ALUMNI UPDATES

Dylan Quinn

Background: Dylan Graduated from RPI in 2015 and was active with the Engineering Ambassadors for his Sophomore, Junior, and Senior Year. His main contribution was the development of the Water Filtration presentation and hands-on activity.



Hi Everyone,

Since graduation I have migrated to our Green Mountained Neighbor- Vermont. Currently I am working with Engineering Ventures in Burlington and have been involved in a variety of projects in the Northeast. Some interesting highlights include a Solar Panel Carport constructed out of trees (not timber or wood), a lifting rig used to renovate one of the Adirondack Great Camps, and a pedestrian suspension bridge to help a property owner access her house without having to wade through a river. My favorite project so far has been the City Market – A natural food Co-op that is expected to open this November. This is more than partly due to the fact it is being built across the street from my office and will be a new spot to grab lunch.

I have continued to do academic outreach through the American Society of Civil Engineers. Last Spring, I led the group's first school visit where we met with a middle school science class and did a presentation and activity on how wind affects buildings. This October, I will be going to the American Precision Museum in Windsor, Vermont to lead a similar event during their Engineering Day. Outreach to the next generation of Engineers is extremely important to ensure our profession has a diverse membership and is intrinsically motivated.

Keep up the excellent work!

Dylan

**REUNION &
HOMECOMING**

RPI Engineering Ambassadors Gathering
Saturday, October 14 at 5 – 7 pm
JEC The Design Lab – JEC 3232

Alumni Weekend

RPI Engineering Ambassadors invite visiting EA Alumni to reconnect.
Please join us!
Buffet dinner will be served