

ALUMNI NEWSLETTER

FIND YOUR PASSION AND ENGINEER IT!

Spring 2024 Rensselaer Polytechnic Institute



HAPPY SPRING!

Welcome to the Spring 2024 RPI Engineering Ambassadors Newsletter. We hope this letter finds you well, and that your time in EA was an educational experience that helped you bloom into who you are today. As always, the Spring semester was an exciting, productive, and rewarding time for 62 EAs. This Spring was our most industrious yet, packed with 25 volunteer outreach events, 20 school visits, and 16 after school programs. We have worked with over 10,000 students across over 60 events this semester! Our largest semester yet! This Spring 2024 edition of our alumni newsletter features a special EA Alum, Sarah Burrows! We love hearing what our alums are up to, and being able to ask them questions about their careers and experiences after college.

As always, a major highlight of our Spring semester was our annual trip to the Bronx. This year, 17 EAs made the trip, including a St. Raymond's alumni who now attends RPI! On this trip, EAs participate in school visits at St. Raymond's High School for Boys, St. Raymond's Academy for Girls, and Riverside High School in Yonkers. We also make sure to leave some time for fun adventures while down in the city!

Speaking of having fun, EAs are making sure being part of the EA family is more than just outreach. EAs competed in intramural volleyball and wiffleball together as a team, schemed against each other in our ongoing game of Assassins, sang together at our Karaoke night, and played against each other in our annual EA Olympics!

And as we do every Spring, we elected our new E-board for the 2024-2025 school year and welcomed a new cohort of EAs. We added to our ranks 22 new EAs in our most competitive application season to date. Each of these new Junior EAs worked hard to separate themselves from all our great applicants, and we could not be more proud to welcome them. We are excited to see the great things they will do for the organization!





SPRING 2024 EXECUTIVE BOARD



School Visit Coordinator
Phoebe Demers



President
Ben Viner



Outreach Coordinator
Isabella Legovich



Recruitment Coordinator
Gianna Scire



PD Coordinator
Cullen Sheridan



Vice Recruitment Coordinator
Jeri Stiklickas



Operations Coordinator
Brian Ju



Vice School Visit Coordinator
Soma Patra

CURRENT EA SPOTLIGHTS

Christian Yamada

Major: Mechanical Engineering

Hometown: Manoa, Hawaii

Internship(s): I am in the interview stage for various companies based in California and Hawaii for this upcoming summer.

Other Involvements at RPI: I am the principal cellist for the Rensselaer Orchestra, an active member of the Society of Asian Scientists and Engineers, as well as a member of the Co-Creation labs where I am using my knowledge to develop a Phase Changing Material based heat exchanger that heats a greenhouse.

Favorite Part of EA: My favorite part of EA is developing new presentations and activities. I am a part of the chip ambassador committee where I help make presentations that will help high school students better understand chips and their manufacturing process. I also enjoy being able to meet so many different types of engineering majors within the organization as it helps me to better understand the various facets of engineering.

After RPI: I hope to get into the semiconductor/chip manufacturing industry.



Indigo Suchar

Major: Environmental Engineering

Hometown: Tacoma Park, MD

Internship(s): This summer I worked at WSSC Water, a water utility in MD, as a water quality intern. I got to help monitor and analyze trends in water quality in the Potomac river. My favorite part was getting to go out on a boat to take samples on the river. This upcoming summer I will be working at JMT as a water/wastewater engineering intern.

Other Involvements at RPI: I play club soccer, and am a member of Engineers for a Sustainable World.

Favorite Part of EA: This past year I've been working with other EA's to build a hydraulic flume to take to schools to teach about how water engineers manage our water resources. It's been a long time since its initial inception and I've gotten to work with an amazing group of passionate EAs to build it. Recently, it went out to its first middle school and the kids absolutely loved it. EA facilitates so much collaboration and innovation and having the opportunity to share my passions with kids has been super rewarding.

After RPI: I'd like to work in the water or wastewater field and eventually get my P.E.



CURRENT EA SPOTLIGHTS

Vivian Rost-Nasshan

Major: Industrial and Management Eng. Minor: Sustainability Studies

Hometown: Silver Spring, MD

Internship(s): I completed research in traffic engineering last summer at the University of Massachusetts, Amherst in their Civil and Environmental Engineering department. I built a traffic prediction model using urban socio-economic and mobility factors. I was lucky enough to be in an National Science Foundation Undergraduate Research Experience, learning with 30 other undergraduates from across the nation.

Other Involvements at RPI: I am currently the 158th Grand Marshal of the Student Senate here at RPI, where I lead the chief legislative body on campus. Additionally, I am the Business Lead of Rensselaer Motorsport, RPI's Formula SAE team. I am also on the Club Quadball team and am conducting on-campus research on nuclear waste consent-based citing under a grant from the Department of Energy.

Favorite Part of EA: I love seeing the kids go from slight confusion to practical understanding throughout the presentation. Their excitement during activities and seeing them collaborate and problem solve always brightens my day.

After RPI: I'm not exactly sure. I want to explore possibly working abroad and exploring the world. I want to work on improving human-centric systems and that is applicable is lots of industries.



Isabella Legovich

Major: Environmental Engineering

Hometown: Long Island, NY

Internship(s): I have interned at both AKRF Inc. and Langan doing environmental consulting and remediation in NYC. My main job was monitoring environmental safety conditions on construction sites and sampling soil, water and air to identify any contamination in the area. I spend most of my time doing field work, which is very exciting, and I am continuing in this field in my upcoming internship as well!

Other Involvements at RPI: In my last year, I was Vice President of SWE where I coordinated collaborative events with other diversity organizations on campus, President of Engineers for a Sustainable World where I led a Solar Bus Stop project and wastewater management system project in EK'Balam Mexico, and an RA!

Favorite Part of EA: I really love the community we've built here and the way we continue to connect even after graduation. Each and every person in this organization is amazingly supportive, intelligent, and compassionate.

After RPI: I am continuing in the coterminal program at RPI to finish my masters in environmental engineering and then I would like to continue into the environmental consulting field.



Alumni Spotlight

Sarah Burrows

Background: Sarah graduated from RPI in May 2023 with her BS in Aeronautical Engineering and joined EA in Spring of 2021. For her conference presentation with Rishika Jandhyala, she introduced EA to Sheila the pink dolphin, who is now seen as a full-fledged member of EA (with more school visits than most members get in their EA career).

Within EA, Sarah worked closely with Michelle Skomsky, Matthew Fox, Aiden Glennon, and Julia Gizzo to induct the newest cohorts. Through the application process she garnered one of the highest number of applicants in the RPI program's history, which will be a positive trend to continue for years to come. Outside of EA, she was usually found playing the saxophone in various groups with her co-executive board member Benjamin Viner or bragging about her dogs.

After graduating from RPI, I became a Graduate Research Assistant at the University of Florida where I work under a world-reknown plasma physicist named Dr. Subrata Roy. With Dr. Roy, I plan to undertake many research projects that will lead into the accumulation of my PhD in Aerospace Engineering.



Currently, I am working on two very exciting projects that will gain more prevalence as the space industry progresses towards interplanetary travel. My first project is implementing Physics-Informed Neural Networks (PINNs) to predict the operation of all the plasma physics that occur within an electric propulsion device called the Hall Thruster. This will be presented in Toulouse in late June! My second project is a Bimodal Nuclear Thermal Propulsion and Nuclear Electric Propulsion System. What is special about this is that it uses a wave rotor topping cycle to achieve our goals of a highly maneuverable spacecraft. With current calculations, we have the potential to cut the travel time to Mars from 9 months to only 2-3 months!

Being a researcher (or a scientist in general) means nothing if you cannot communicate your ideas with the general public. Being in EA has enabled me to juggle the many hats that I wear within my research lab, while being an efficient communicator towards students from all walks of life. The experience you gain from EA is invaluable and I just hope that everyone immediately involved in the program soaks up every second of it!



OUR SUPPORTERS

Thank you to everyone who has supported our Engineering Ambassadors since day one. We are extremely grateful to all who have played a part in making our work possible over the past year. Here are some of the organizations and companies that have supported our program, collaborated with us, and that RPI Engineering Ambassadors have gone on to work for. We can't wait to see what opportunities the next year brings!



SOCIAL MEDIA



@rpi_ea



/RPIEngineeringAmbassadors



YouTube RPIEngAmbassadors

FEELING GENEROUS?

Simply Call RenXchange at 518-276-6055 and ask to donate to the Engineering Ambassadors fund directly. Engineering ambassadors is always willing to accept donations to help continue bringing the inspiring field of STEM to the youth.

