

ELPE NEWS EXPERIENTIAL LEARNING AND PROFESSIONAL ENGAGEMENT

FALL 2023

Biannual Publication of the University of Pittsburgh

Swanson School of Engineering

+ And the Winners are...

Each year the Co-op program awards a Co-op Student of the Year and a Co-op Employer of the Year Here are our winners in 2022

Co-op Student of the Year

Juliet Varblow

A recent graduate from the Mechanical Engineering department, Juliet completed three rotations with Siemens Energy in Mt. Pleasant, PA. As a Generator Servicing Development co-op, she contributed to major projects while also designing, molding, and drafting numerous tools for generator servicing and shop organization. On campus, Juliet was a Makerspace Mentor and a student leader in Theta Tau and the Society of Women Engineers. Congratulations Julia!



Picking a winner was challenging. Many talented students have contributed in their Co-ops! Congratulations to the other nominees:

Finalist

Caliegh Wettasinghe - Electrical Engineering Honeywell

Honorable Mentions

- Adam Aukamp Electrical Engineering Acutronic
- Nishant Chitluru Bioengineering Zoll Cardiac Management Solutions
- Madeline Kingsbury Industrial Engineering C3 Controls
- Heather Little Industrial Engineering Giant Eagle
- Patrick Murphy Mechanical Engineering Mosebach Manufacturing
- Even Prem Mechanical Engineering Conair/IPEG
- Lucas Ramsey Mechanical Engineering Siemens Energy
- Gary Sciulli Civil Engineering Richard Goettle, Inc.
- Jessica Steinberg Bioengineering Philips
- **Karen Turocy** Computer Engineering IQ, Inc.
- Paige Wells Chemical Engineering Cardno ChemRisk
- Sida Wilson Bioengineering Zoll Cardiac Management Solutions

Co-op Employer of the Year

Mosebach Manufacturing

Mosebach Manufacturing is located in the South Hills/Pittsburgh, PA and has been supplying high power resistors for over 90 years.

Partnering with our Co-op program since 2014, managers and Pitt alumni have mentored and supported numerous engineering students. Dan

Stein, a Pitt alumnus of both the Swanson School of Engineering and the Katz Graduate School of Business, now oversees the Co-op Program.

One of our former co-ops from Mosebach stated in their nomination: "In the power testing industry, they are known for solutions that no other competitor can come up with, especially when they design custom load banks/industrial heaters/ bed bug killers. As a Co-op, I was thrown into that from day one and I loved it. There was so much opportunity to grow as a professional and learn how do good work that both makes your manager happy and the customer happy. The people there are also top tier. They can see what you are capable of and aren't capable of. The type of work assigned to co-ops is in good faith that co-ops can get it done well and learn a few new things along the way."

The ELPE office looks forward to our continued partnership with Mosebach Manufacturing!



ALUMNI SPOTLIGHT

A native of McDonald, PA, Electrical Engineering major, Society of Women Engineers (SWE) section president, and co-op program alumna, **Emily Richard** graduated from Pitt in December 2022 and now works in an international rotational program at Siemens Energy, where she works on sustainable electric grid solutions.

Emily knew going into school that she wanted to complete co-op and internship experiences. She initially landed a co-op role that fell through due to COVID and used the co-op office to find a replacement position at Pioneer Power Group, where she completed three rotations. Throughout her rotations she moved up in seniority and responsibility, eventually working in the same capacity as the full-time engineers at the company. While at Pioneer Emily performed electrical modeling and analysis and wrote an Excel macro that led to a process improvement of 25 percent for the engineering team's data requests. In addition to technical skills, Emily says that her time at Pioneer taught her discipline and to be a team player.

Following her co-op experience, Emily interned at Tesla in Austin, TX in the summer of 2022 as an Electrical Construction Management Intern. Going from a small team at Pioneer to a large company, Emily was able to explore multiple work environments and use her experience to take on more of a management role. While at Tesla she implemented a new workflow that resolved over 800 labeling issues in CxAlloy, resulting in accurate safety labels for electrical field workers. Emily explained that she was open to relocating for the internship and for her current job, and that she approaches her career choices strategically and with exploration.

Emily now works for the Siemens Energy Graduate Program (SEGP) in Raleigh, NC, where she will complete three 8-month rotations and at least one international rotation, each including an international development week – her first development week took place in Dubai, UAE. In her first rotation Emily is working in project management and technical sales, on a team focused on grid access and converting wind power from DC to AC. In addition to the travel, Emily says her favorite part about working at Siemens is being able to work in sustainability and being part of the clean power movement. Her academic interest in sustainability began when she completed a virtual Danish study abroad program while at Pitt and has continued throughout her career.

Looking to the future, Emily is excited to live abroad. Her next rotation with Siemens will be in Erlangen, Germany, with a development week in Berlin. She wants to continue to choose rotations and roles strategically to allow her to grow in her career and would like to someday add an MBA to her current engineering expertise. Emily also wants to continue her leadership and involvement in SWE, where she served as section president in 2022, and she recommends that current students stay involved with their interests post-graduation. Naming her parents, SWE leaders, advisors, and the co-op office as career mentors and influences, Emily says that she seeks out as much input as possible when making decisions. She views life as a marathon and not a sprint and wants current Pitt students to know that it's okay to pivot and reinvent themselves to fully pursue their passions.

Congratulations, Emily, on your continued success!





Mark Your 2023 Calendars

Employer Panels During Seminar

Industrial Engineering Tuesday, September 12 Civil Engineering

Friday, September 15

Mechanical Engineering Friday, September 22

Computer and Electrical Engineering **Monday, September 25**

Experiential Learning Student Panel Wednesday, September 6 – Noon - 1 p.m. Benedum Hall

Alumni Mock Interview – Graduate Students Wednesday, September 13 – 9 a.m. - 12:30 p.m. Benedum Hall

Alumni Mock Interview – Undergraduates Friday, September 15 – 9 a.m. - 12:30 p.m. Benedum Hall

Institute of Industrial & Systems Engineers Pitt Chapter Career Fair Friday, September 22 – 10 a.m. - 2 p.m. *Benedum Hall*

ELPE Co-op & Internship Fair Tuesday, September 26 – 9:30 a.m. - 1:30 p.m. optional interviews from 1:30 - 4:30 p.m. University Club

American Society of Civil Engineers (ASCE) Pitt Chapter Career Fair Friday, September 29 – 11 a.m. - 2 p.m. optional interviews from 2:30 - 3:30 p.m. O'Hara Student Center, 2nd Floor Ballroom

Nominees Due Monday, October 16 Co-op Student of the Year and Co-op Employer of the Year







STUDENT >>> **EXPERIENCES**

























At the 2023 Automate Conference in Detroit, Michigan, one of the largest robotics conferences in the country, mechanical engineering students Micah Nye (third from left), and Nicholas Chermak (second from right), along with their team represented ESTAT and the Pittsburgh Robotics Network and took first place in the Automate startup challenge. "I was pushed outside my comfort zone and worked hard, and learned many crucial technical and soft skills, ranging from working with electromechanical hardware and software development to making important, data-backed decisions informing the path of the company," said Micah.

Kirby Witte, the VP of Engineering at ESTAT, commended the company's co-op students on their achievement. "We believe that everyone gets credit at ESTAT and I am honest when I say we would not be where we are today without our co-op students. Our co-op students are key members of our team. They take on tough projects and complete important work. They also play a key role in defining the culture of our company. Thank you for helping provide this opportunity to both students and to companies like ours."

- Co-op Director Chris Ann Frankovic (back left) and prospective co-op students on a Pitt alumni-led site tour of American Airlines in Spring 2023.
- **2.** Finalist for Co-op Student of the year "[At Honeywell] I worked on the hardware including the terminal and headset for an integrated voice solution for industrial workplaces. I performed performance and compliance testing for existing products and prototypes, designed PCBs (printed circuit boards) for quality testing and programming during manufacturing, worked with customers to do failure analysis, and in my last rotation mentored new interns. In this picture I am testing power consumption on handheld terminals." - Caileigh Wettasinghe, Honeywell
- "Working as an engineering co-op for Avient last fall was such a rewarding and fulfilling experience. I quickly learned about the fast-paced environment that exists within manufacturing and was able to lead projects that had a real impact on the processes of the plant I was working at!" - Saipriya Namasivayam, Avient
- **4.** "At Acutronic...I have been assisting mechanical engineers with their projects by designing parts, creating drawings, and doing load verification calculations. Here, I am performing a wobble test using a high precision autocollimator on this motor drive pack that the company built, verifying that it meets the specification of wobble under an arcsecond." – Zachary Kushnir, Acutronic
- 5. Ethan Lee started the first of three rotations at Siemens this past summer in Pittsburgh, PA.
- **6.** Three chemical engineering students worked together at BASF's Monaca, PA location this past summer. Kaela Guest (left) had her final rotation. Tyler Bindas (center) and Jenna Rogish (right) are scheduled to return for final rotations in 2024.

- 7. Aaron Esquino (right) completed a graduate student HVAC internship this past summer with Johnson Controls in Cranberry Township, PA.
- 8. Jieru Zhao, a graduate student, spent this past summer as a Power Electronics Summer Intern in Troy, MI, working on green mobility for Aptiv's Vehicle Electrification Systems business unit.
- 9. Nicole Jackson (bottom left) worked as an operational excellence co-op on her first rotation at Penske Truck Leasing and is scheduled to return for a second rotation in 2024.
- 10. Sida Wilson (second from right) received honorable mention for Co-op Student of the Year and completed four rotations at Zoll Cardiac Management Solutions.
- **11. Gary Sciulli** received honorable mention for Co-op Student of the Year and is currently attending Pitt for graduate school in civil engineering. He is pictured building a mile-long retaining structure for the Wellsburg Bridge in Wellsburg, WV. for Richard Goettle, Inc.
- **12.** During her graduate program **Manisha Mondal** participated in two co-op experiences, at Intel Corporation in Folsom, CA and at Advanced Micro Devices in Austin, TX, working at both employers as a product development intern.
- **13.** In the headworks facility at Ulliman Schutte, Luke Hamilton (right) explains the wastewater machinery to co-op students from other work sites.
- 14. Colin Landis worked three rotations with Johnson & Johnson as a manufacturing sciences and technology co-op in Fort Washington, PA. He is pictured weighing out material for a lab-scale batch.

- ww.estat.tech AUTOMATE DEMANIX May 23, 2023 \$ \$10,000 1 Thousand Dollars and 09
 - **15. Zhengmian Hu** worked this past summer as a graduate research scientist at Adobe, in San Jose, CA and previously worked a remote position in the summer of 2022.
 - **16.** Chloe Hale completed her third co-op rotation with Acutronic this past spring. "I would say nothing has prepared me more for my future than working as a co-op at Acutronic, from the projects to the people."
 - **17.** At PennDOT, **David Jensen** acts as a project inspector. Here he is tracking the concrete usage of a team replacing a deteriorated pillar on I-376.
 - **18. Juliette Davoine** completed her first rotation this summer at MSA as a respiration protection co-op. Here she is wearing fireman turnout gear to stay warm during a freezer test on one of MSA's main products.
 - **19. Shunsuke Uemera** had his first co-op rotation this summer with Emerson, working on the Power and Water Solutions team in Pittsburgh, PA, and is scheduled to return for his second and third rotations in 2024.
 - 20. A graduate biomedical student, Varun Shilesh is currently working a yearlong human factors engineering co-op with Zoll in Pittsburgh. "It has been a wonderful experience thus far and I have learned a lot. I effectively applied the knowledge and skills gained at the Swanson School, which helped me succeed at my job!"
 - **21. Paige Dillon's** office is an airline hangar! She started her first of three co-op rotations at American Airlines this past summer.

\star It's that Time of Year!

2023 Co-op Student and **Employer of the Year** Nominations

It is time once again to think of nominations for both Co-op Student of the Year and Co-op Employer of the Year for 2023. We appreciate any and all nominations.

The Criteria for Co-op Student of the Year are:

- 1. Excellent academic record
- 2. Outstanding work contributions with co-op employer (students must have three rotations completed)
- 3. Volunteerism or contributions to co-op or University community

We would like to have one nominee from each engineering department, students can be nominated by their employer or department. The winner will then represent Pitt in the National Co-op Student of the Year competition which is sponsored by the Cooperative Education Division through ASEE. Pitt students have won six times nationally, and we have had many outstanding finalists!

The criteria for Co-op Employer of the Year are:

- 1. Sustained commitment to cooperative education at the University of Pittsburgh
- 2. Quality of projects and assignments

Please direct any questions or nominations to Chris Frankovic at caf54@pitt.edu by October 16.

* New Employees

Chandra Colaresi, MA, MPPM

Global and Engineering Professional Development Consultant

Chandra (left) joined the ELPE and Global Experiences teams at Swanson in November 2022, and is currently working on expanding Swanson's co-op/internship/research opportunities globally.

Office Hours: Monday/Wednesday/Friday in office: Tuesday/Thursday remote: 8:30 a.m. – 5 p.m.

Valerie Kerr, MBA, MSA

Graduate Engineering Professional Development Consultant

Valerie (center) joined the ELPE team in November 2022 and works with MS and PhD students on career and professional development, including co-op and internship placement. She also assists Swanson graduate students with their full-time employment searches and works closely with the Office of International Services (OIS) for work authorization and student services for international students

Office Hours: Tuesday-Thursday in office; Monday/Friday remote; 8:30 a.m. - 5 p.m.

Emily Kern, BA

Program Administrator, Cooperative Education & Internships

Emily (right) joined the ELPE team in February 2023, and serves as a point of contact for departmental administrative needs, including onboarding new co-op students, processing enrollment, and data gathering projects.

Office Hours: Tuesday-Thursday in office: Monday/Friday remote; 8:30 a.m. - 5 p.m.



Office of Experiential Learning and Professional Engagement Staff

Co-op and Internship Division

Chris Ann Frankovic. Director Departments covered: COE, EE, ME, MSE, IE, Physics E caf54@pitt.edu

>>> Linked in SSoE ELPE office now has a LinkedIn page! Connect here!

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Valerie Kerr, Graduate Engineering Professional Development Consultant vek32@pitt.edu

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COOPERATIVE EDUCATION PROGRAM

engineering.pitt.edu/coop