



# FROM THE DIRECTOR

ERIC A. NAUMAN | DIRECTOR, OFFICE OF PROFESSIONAL PRACTICE



Welcome to the latest edition of the Office of Professional Practice's Annual Report:

Despite the many challenges of the past year, the Office of Professional Practice was able to push forward on a number of fronts and I owe everyone a heartfelt thanks. The OPP staff not only learned how to operate in a hybrid manner, but designed, tested, and delivered new programs. Our corporate partners continued to provide encouragement and help sustain our efforts all around the world by creating professional experiences for Purdue students. The 2020 - 2021 academic year was not at all what we expected, but our students continued to demonstrate their perseverance, adaptability and work ethic.

OPP's mission is to promote experiential education within the academic environment of the institution; this continues to hold value for students, faculty and our corporate partners and we are deeply appreciative of all our stakeholders. While many of our programs remained virtual through the spring semester, we celebrate the 5,000+ students we were able to engage with through workshops, presentations, virtual information sessions and more. We continued to grow our Milestones program with over 140+ digital badges earned this year and have pioneered a number of methods to provide students with hands-on experiences – even at a distance. It has been a considerable amount of effort, but this experience has offered our office opportunities for growth in how we collaborate and use technology. From an educational perspective, our goal is to ensure that Purdue students are able to accomplish as much as possible during their work rotations and expand their skill sets while on campus. This mantra, combined with our flexible approach, allowed us to make some changes to our co-op certificates, create and implement a number of remote global design projects with partner universities around the globe, and explore the launch of a new, continuous co-op model, called Learning While Working.

We hope you enjoy the stories and highlights included, demonstrating the effort and success of the Office of Professional Practice.

Eric A. Nauman  
Director, Office of Professional Practice  
Professor of Mechanical Engineering, Biomedical Engineering, and Basic Medical Sciences

# TABLE OF CONTENTS

04	OUR PROGRAMS
06	OFFICE UPDATES
08	STUDENT AND EMPLOYER STATISTICS
10	GET IN GEARE
12	RECRUITMENT AND ENGAGEMENT EFFORTS
14	CORPORATE SPONSORSHIP
16	EMPLOYER PARTNERS
18	SCHOLARSHIP RECIPIENTS
20	STUDENT ACHIEVEMENTS
22	CO-OP ALUM SPOTLIGHT - KATIE DUDEK
23	GEARE ALUM SPOTLIGHT - ZIHAN WANG



# OUR PROGRAMS

## COOPERATIVE EDUCATION

Purdue Co-op has been the premiere professional work experience program at Purdue University for over 60 years. Students participating in the program can earn an academic certificate upon graduation. Students participating in co-op enhance their academic knowledge with practical skills through progressively challenging work experiences with industry partners. Purdue's Industry & Extensive Industry co-op models (defined below) for undergraduate students can result in 12-20 months of work experience. Co-op provides students with an in-depth knowledge of a company. 80% of co-op students earn a full-time offer with their company prior to graduation. Graduate students may participate in the Master's co-op program, which allows students to complete a 6 to 12-month work rotation with an employer prior to completion of their degree.

After extensive conversations with top co-op universities in the U.S. and Canada, internal conversations with faculty, co-op coordinators, and students, and external conversations with industry partners, Purdue has updated the co-op certificate program to provide greater access and flexibility to both students and employers. We are pleased to present the new Co-op Certificate descriptions:

### INDUSTRY CO-OP CERTIFICATE

The Industry Co-op Certificate is awarded to students who have gained about one year of full-time work (at least one fall/spring semester) experience related to their academic field of study. Students will register for a cooperative education course during each academic term for which they are engaged in full-time work with an employer. Students are required to complete a minimum of three work terms. Students should have a progressive experience, with a minimum of two work terms occurring with the same employer. Students must complete all necessary requirements specific to their academic discipline.

### EXTENSIVE INDUSTRY CO-OP CERTIFICATE

The Extensive Industry Co-op Certificate is awarded to students who have gained 18 months or more of full-time work experience related to their academic field of study. Students will register for a cooperative education course during each academic term for which they are engaged in full-time work with an employer. Students are required to complete five work terms. Students should have a progressive experience, with multiple work terms occurring at the same employer. Students may change employers one time. Students must complete all necessary requirements specific to their academic discipline.



## GLOBAL ENGINEERING ALLIANCE FOR RESEARCH AND EDUCATION (GEARE)

GEARE is Purdue's premiere global professional training program. The program is currently available to students from all engineering disciplines and computer science. GEARE students enhance their global competency by completing language study, one semester of study abroad, a minimum of one domestic internship, a minimum of one global internship, three one-semester cultural training seminars and a minimum of one global design team project. During the COVID-19 pandemic, GEARE students participated in remote global projects along with students from universities in Ecuador, Germany and Mexico. New projects are being developed with university partners in France and Switzerland along with Daimler, Siemens and the Pan-American Health Organization.

The Office of Professional Practice develops relationships with world-renowned university partners and global industry partners interested in developing future employees with top of the line technical and global skills. The office has strong partnerships with universities and global employers operating in the U.S., Brazil, China, Colombia, Ecuador, France, Germany, India, Italy, Japan, Mexico, Singapore, South Korea, Spain and Sweden. GEARE utilizes the Intercultural Development Inventory (IDI) and a series of a courses to help students maximize their growth in global competency. Research conducted by Purdue's Center for Intercultural Learning, Mentorship, Assessment, and Research (CILMAR) finds GEARE to be one of the most effective programs in the U.S. in encouraging global competency development amongst its participants.

## INTERNS FOR INDIANA (IFI)

The Interns for Indiana program connects entrepreneurially-minded Purdue University students to Indiana startup and early-stage companies in order to promote economic development, enhance student success, and provide professional opportunities to high performing students. Students will complete their internship during the summer. The Office of Professional Practice offers funding to help these companies hire student talent.

## MILESTONES

The Milestones Program was created in 2019 to provide technical experiences to supplement and enhance knowledge gained in the classroom. Milestones modules average 15 hours of hands-on education in a particular technical field. The modules are currently offered for free to Purdue students. Students successfully completing a Milestones module will earn a certificate. Milestones modules include CAD/3D Printing, Finite Element Analysis and Fabricating Composites, under the Prototyping and Manufacturing Family and Arduino Programming, Introduction to Electronics, Biomedical Instrumentation, and an electronics capstone project on Designing a Smartwatch under the Electronics and App Development Family. The Milestones program aims to enhance the technical abilities of Purdue students while providing industry with co-ops and interns ready to make an impact on day one.

## LEARNING WHILE WORKING

The Office of Professional Practice is launching Learning While Working (LWW). The LWW program is a new co-op model allowing students to gain a full-year of professional experience while earning credits to reduce the time of the normal co-op study plan from 5 years to 4.5 or 4 years. OPP will build partnerships with co-op employers to hire cohorts of students for a full-year continuous co-op program. While working, students will take one 3-credit course online during each of the three academic periods for which the student will be registered for co-op. OPP will work with Purdue academic units to offer courses online that will be meaningful to the students plan of study as well as for their work within the company. In addition, each company participating in LWW will offer an engineering project to the entire cohort of LWW students. The project will have company mentors as well as a Purdue faculty mentor. Students will be allowed to work on the project during work hours, approximately 10 hours per week, and will receive 6 credits for their project work. In total, students will be able to earn one semester of credit throughout their year-long work experience, reducing time to graduation. The program will launch in January of 2022. As of July 1st, 2021, Cummins and GM will be the initial employers to pilot the program, each with a cohort of 5-10 students.

# OFFICE UPDATES

## PROFESSIONAL PRACTICE HALL OF FAME 2020

Due to implications regarding COVID-19, it was unanimously decided to cancel the 2020 Professional Practice Hall of Fame. This was a difficult decision, but it was determined to be the best course of action in order to adequately honor the inductees. OPP is looking forward to the return of the Professional Practice Hall of Fame in 2021.

## THANK YOU, RACHEL HAAS

The Office of Professional Practice celebrated the retirement of Rachel Haas, Administrative Assistant, in April of 2021 after 40+ years of service to Purdue. We thank her for dedication to the office and all that she did to make operations run efficiently.



## CEIA VIRTUAL CONFERENCE: OPP PRESENTS WITH DAIMLER

Joe Tort, Associate Director of the Office of Professional Practice, and Francisco Montalvo, Assistant Director of Global Projects, partnered with Daimler to present virtually at the CEIA annual conference on developing a comprehensive global program. This presentation was done in collaboration with Jim Adelsperger, Manager of Engineering Mechanics at Daimler, and Sara Paradish, Engineering Program Manager at Daimler. This presentation led to conversations with multiple universities to provide consultation and feedback on their current and potential structures for global programs.

## CONGRATULATIONS, JOE TORT

Joe Tort was named the recipient of the 2021 Outstanding Leadership in Globalization Award. This award is given to staff who emphasize the importance of and are committed to university global outreach. He has increased the number of international employers that hire Purdue students by 122%! He also continues to promote the development of student global competency through the GEARE program. The office is grateful for his leadership and dedication to students.



## LAUNCH OF 5 PILLARS DESCRIBING OPP EDUCATIONAL GOALS

The Office of Professional Practice defined five pillars describing the office's goals for students in regard to the overall development of Purdue students.

### PROFESSIONAL DEVELOPMENT: EARLY STEPS TO PREPARE STUDENTS

- ENGR 103 course prepares students with development of resumes, cover letters, elevator pitches, job searching, etc.
- Learning about discipline specific programs and connecting with engineers in industry
- Building a professional network

### TECHNICAL DEVELOPMENT : HANDS-ON & PRACTICAL SKILL TRAINING

- Practical training to enhance student skills prior to or when returning from industry experiences
- Milestones courses providing practical skills

### PROFESSIONAL EXPERIENCE: PROVIDING STUDENTS A WAY TO ALWAYS STAND OUT

- Meaningful work experiences evaluated by Purdue faculty
- 12+ months of progressively challenging work
- 400+ employers devoted to student development seeking Purdue students for industry experience
- 80% of students are offered full-time positions with their co-op company

### GLOBAL EXPERIENCE : PURDUE STUDENTS GAINING PROFESSIONAL EXPERIENCE AROUND THE WORLD

- GEARE & Global Project courses
- 700+ program alumni working across the globe
- Higher starting salaries
- Global Engineering Studies Minor
- 400+ current students with an average 3.6 GPA

### GLOBAL PROFESSIONAL SKILLS : PROVIDING STUDENTS WITH SKILLS TO STAND OUT

- Academic coursework implemented into GEARE
- IDI and Global Competence promoting self-reflection, knowledge about others, managing emotions and strategies for bridging cultural gaps



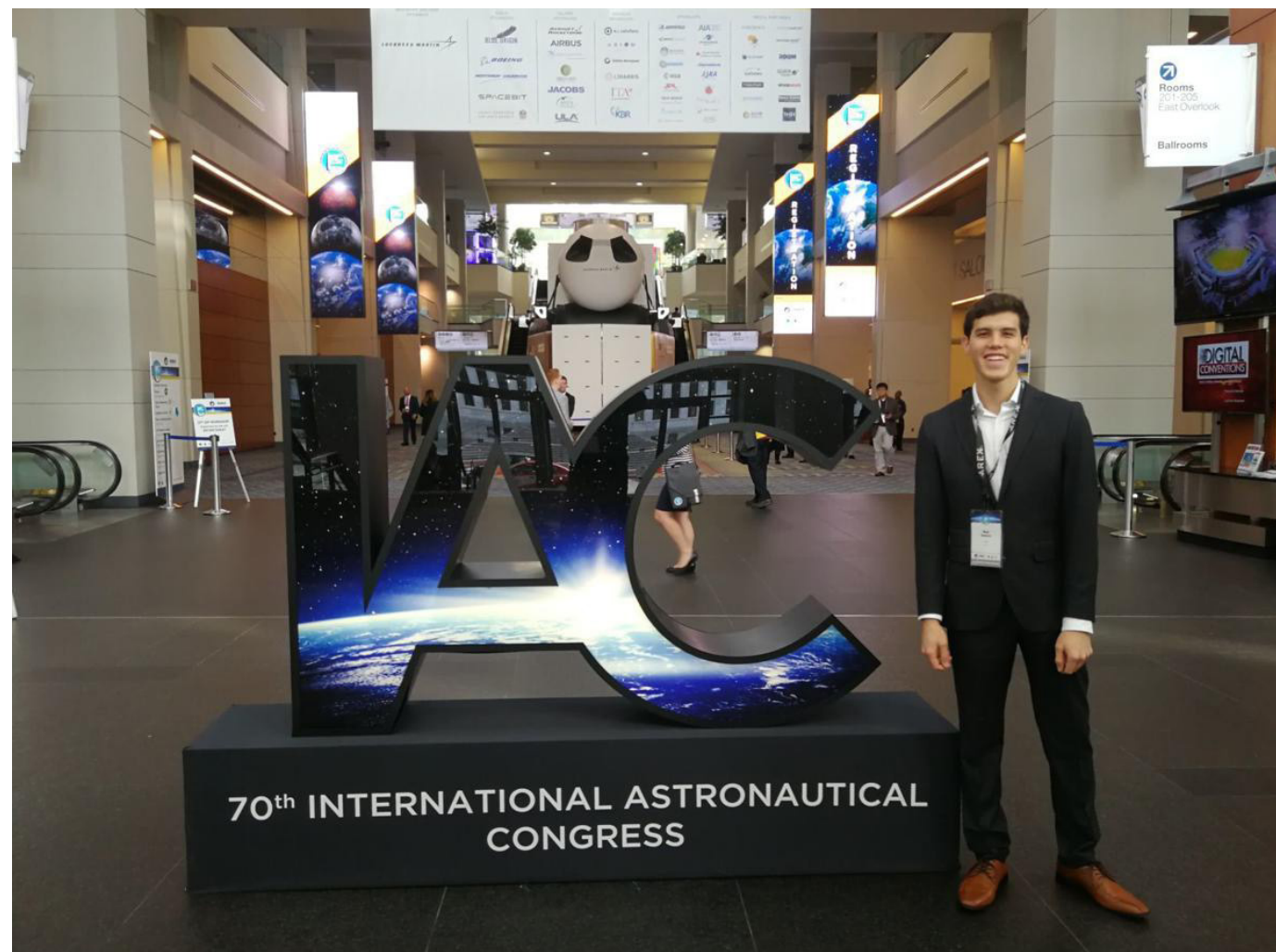


# GET IN GEARE

## PARTNERING WITH PROJECT POLARIS

GEARE is partnering with Project Polaris, a global design team created by Purdue AAE and GEARE student Roy Ramirez.

Project Polaris, a two-year project that focuses on the globalization of space, enables participants to design a rover capable of traveling to and operating on Titan. What makes this project unique is the use of a balloon instead of wheels for the Rover to get around. The prototype of the rover is named Star Rover. Participants will plan to travel to Costa Rica in the summer of 2021 and utilize labs associated with the Costa Rica Institute of Technology to work on prototypes. Once complete, participants will travel to IAC in Paris in 2022 to present their technology. With partners like GEARE, Costa Rica Institute of Technology, ESTACA Space Odyssey, TECSPACE Costa Rica & Valispace and Itinéraires Interculturels, Roy worked endless hours to create relationships and opportunities for students to receive technical and cultural guidance on the project.

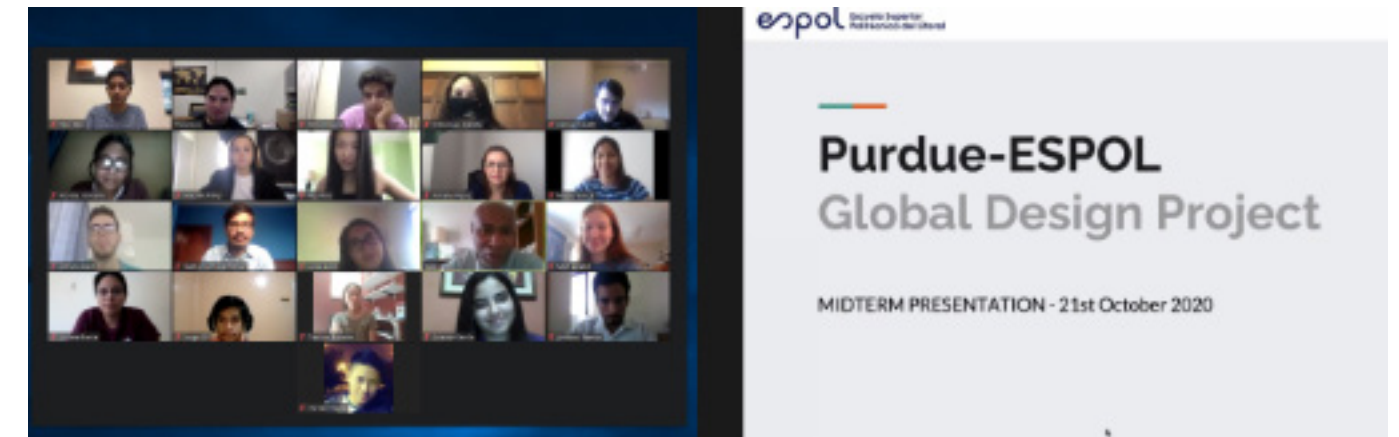


## REMOTE GLOBAL PROJECTS IN RESPONSE TO COVID-19

Due to COVID-19, OPP created new ways to help GEARE students gain meaningful global experiences. With the assistance of the Pan-American Health Organization and partner universities such as Karlsruhe Institute of Technology and Leibniz Universität Hannover in Germany, Escuela Superior Politecnica del Litoral and Universidad San Francisco de Quito in Ecuador and the Aeronautical University in Querétaro in Mexico, Purdue students were able to work in multidisciplinary teams to tackle real world problems related to engineering, transportation, energy, sustainability and economic prosperity in a global context.

Over 120 Purdue students enrolled in these courses where they learned about the challenges and cultural implications of working with engineers from a different culture. Students successfully navigated challenges brought about by language differences, time zones and varying perspectives on how a team should operate. Students gained an extensive amount of experience in project planning, management and design evaluation.

Projects titles included Evaporative Air Cooling in South Sudan, Development of a New Powertrain Generation for an Agricultural Tractor, Tropical Produce Conservation & Processing, COVID-19 Wastewater Surveillance Project, Design of a Lift Surface for a Variable Camber Trailing Edge Application, Fruit Dehydration, Evaporative Cooling for Mango Storage and Watershed Management in a Coastal Aquifer.



## GROWING THE GEARE NETWORK

50+ GEARE alumni attended a virtual networking event this spring. The virtual meeting provided an opportunity for alums to connect while providing OPP with feedback on ways to improve the GEARE program, connect current students with alums and provide better support to GEARE alums post graduation. OPP and GEARE alums began discussing the organization of the GEARE 20th anniversary reunion to be held in Germany during Summer 2023.

One tangible result of this meeting is the creation of the "GEARE Alumni & Friends" group on LinkedIn. The group already has 330 members who can stay connected, share job opportunities and more.

## CONGRATULATIONS GRADUATES

48 GEARE students graduated in Spring 2021 and received the Global Engineering Studies minor.

## LC 490: HUMANITIES INFORMED ENGINEERING

With 19 students enrolled, this new course examines engineering case studies and discusses the impact of culture on engineering practices. The course was established with funding from a grant through the National Endowment for the Humanities. There were two sections offered during the spring semester - one in English and one in Spanish. This course was instructed by Gabriel Rios Rojas, a Spanish instructor with a 30-year career in engineering.

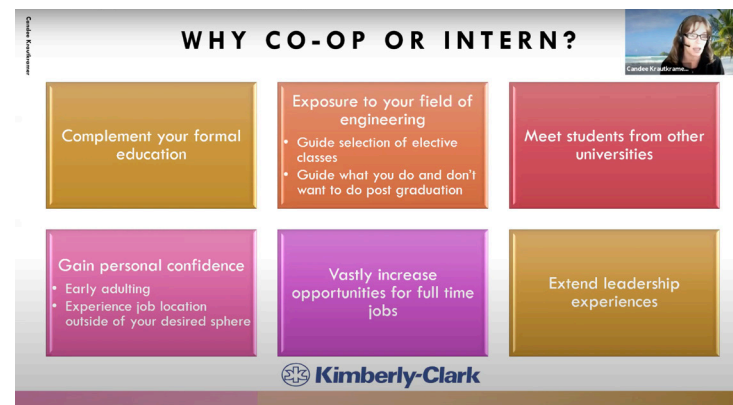


# RECRUITMENT AND ENGAGEMENT EFFORTS

## VIRTUAL COMPANY INFO SESSIONS

1,900+ students attended virtual info sessions with employers interested in hiring co-op students. These companies included:

NASA	Kimberly-Clark Corporation	Perry & Associates
Aruba	Gulfstream	Parsons
TSMC	USACE	Delta Faucet Company
Tesla	Honeywell	HNTB Corp.
Rust-Oleum	GE Appliances, A Haier Company	



## SILICON VALLEY RECRUITMENT EVENTS

With the pandemic limiting face-to-face interaction, the Office of Professional Practice adapted to a virtual recruitment process with focus on the Silicon Valley region. 500+ students attended various events such as:

- Intel Capital (Santa Clara, CA) Tech Talks & Career Fair
- Apple (Cupertino, CA) Info Session & Recruitment Event
- HP (Palo Alto, CA) Info Session & Recruitment Event
- Apollo Fusion (Mountain View, CA) Info Session & Recruitment Event
- OmniVis (San Francisco, CA) Info Session & Recruitment Event
- Cloudleaf (San Jose, CA) Info Session & Recruitment Event
- ZOOX (Foster City, CA) Info Session & Recruitment Event

## PROFESSIONAL DEVELOPMENT

251 students attended various professional development workshops hosted by employers and Purdue's Center for Career Opportunities. These sessions provide students the opportunity to work on their professional skills needed for interviews and the workplace. These workshops included:

Resume Writing	Interviewing 101
Keys to Success at Career Fairs	Virtual Resume Tables
	Virtual Interview Workshop

## GEARE VIRTUAL RECRUITMENT

127 students were accepted into the new GEARE cohort and attended a virtual welcome meeting. Efforts are being made to grow the program while adapting to the current state of the pandemic. The office is looking forward to offering the traditional GEARE experience to students in the 2022 cohort.

897 students participated in virtual recruitment opportunities, including the GEARE virtual career fair, showcasing eight global companies. The Office of Professional Practice worked with Engineering Communications to create an employer video to highlight and demonstrate the attributes of GEARE.



# CORPORATE SPONSORSHIP

Purdue University has a long and distinguished history of partnering with industrial and governmental organizations to provide undergraduate students with practical training to enhance their educational experiences. One aspect of these partnerships is Corporate Sponsorship. The Office of Professional Practice is grateful for our corporate sponsors who provide the best experience to all students participating. We are very grateful for corporate gifts received for the 2020-2021 academic year and would like to share with you how these gifts have been utilized.

When determining the best use of corporate gifts, we reflect on our department Mission Statement (below) and the aspect of enhanced employer engagement. The generosity of our corporate partners greatly impacts many students' ability to participate in our programs and enables OPP to provide exceptional service to both students and employers.

## OPP MISSION STATEMENT

To facilitate the experiential education and professional practice of Purdue University students within the academic environments of the institution and its global partners; to participate in academic research within the field of Professional Practice and to assist the academic units with *enhanced employer engagement*.

## HOW WE USE THE FUNDING

### PROFESSIONAL DEVELOPMENT FOR STUDENTS

Your support helps fund our student run professional development and networking events each semester. Our student organizations, Professional Practice Ambassadors & GEARE Ambassadors promote various student development initiatives. OPP engages with 5,000+ students each semester through workshops and academic courses.

### ACADEMIC SCHOLARSHIPS

Your support helps us fund students with academic scholarships to pursue work both in the classroom and outside of it. Did you know that a co-op student pays \$400 in student fees to keep their student status while on a work session?

### AWARDS & RECOGNITION

Your support helps fund special events where we can recognize both students and alumni for professional achievements awarded throughout their experiences in our programs.

### STUDENT EMPLOYMENT

Your support helps fund student employees. The Office of Professional Practice hires experienced Co-op & GEARE students to serve as teaching assistants in our professional skills courses and to help us promote the value of gaining professional experience to students throughout the university.

### JOB PERFORMANCE ENHANCEMENT

Your support will allow our staff to do site visits to engage with our students and your company to measure progress and hear your feedback on work performance.

### TECHNICAL SKILLS

Your support helps fund MILESTONES, our technical development workshop program where students take courses to learn skills such as programming with Arduino, CAD/3D Printing & more.

OPP EMPLOYER

## SPONSORSHIP BENEFITS

	BLACK	GOLD	PLATINUM
Advertising on LCD screens, logo placement on digital print, websites & at conferences	\$2,500	\$5,000	\$10,000
Personalized invitation to participate in OPP events and access to event calendar	2 Employer named scholarships will be awarded to Professional Practice students in the amount of \$500	4 Employer named scholarships will be awarded to Professional Practice students in the amount of \$500	8 Employer named scholarships will be awarded to Professional Practice students in the amount of \$500
Invitation to promote company through ENGR 103 classroom as a guest lecturer, guest blog posts, social media spotlight, etc.			
Early pick for preferred placement at events sponsored by OPP			
Registration for 2 tables to be utilized during Professional Practice Career Fair or Interviews			
Guaranteed invitation to attend annual networking event with Co-op /GEARE students			
Access to resume books for graduating Co-op and GEARE students			
Employer-sponsored info session or workshop to be coordinated in-person or virtually			
Registration for 2 additional tables (4 total) to be utilized Professional Practice Career Fair or Interviews			
Full day campus branding event where your company can plan presentations, meet with students, interview, etc.			
Registration for unlimited tables to be utilized during Professional Practice Career Fair or Interviews			
Employer marketing video on website			
Company named Undergraduate Teaching Assistant in ENGR 103; Professional Development skills course			
Planning & executing a technical development seminar for our students (Milestones Course)			

The Office of Professional Practice aids in producing graduates who are job ready, career ready, and world ready. Therefore, our experience-driven graduates are especially lucrative hires in both the public and private sector.

**Are you interested in recruiting these excellent candidates? Become a Professional Practice Partner!**



# EMPLOYER PARTNERS



DAIMLER

ExxonMobil



**ZF Group** is a global technology company that supplies systems for passenger cars, commercial vehicles and industrial technology. With its broad portfolio, the company offers integrated solutions for established vehicle manufacturers, mobility providers and start-up companies in the fields of transportation and mobility.

**Air Products** serves customers across a wide range of industries, from food and beverage to medical, energy and transportation with approximately 16,000 employees and operations in 50 countries. They also supply a unique portfolio of atmospheric and process gases, equipment and service.

**GE Aviation** is a world-leading provider of business, military, and commercial jet engines, components and integrated systems for commercial and military aircraft. GE Aviation has a global service network to support these offerings.

**General Motors** provides a complete range of vehicles that meets the needs and expectations of drivers on a truly global scale. GM is the only company with a fully integrated solution to produce self-driving vehicles at scale and are committed to an all-electric future.

**ExxonMobil** operates in most of the world's countries and is best known by their familiar brand names: Exxon, Esso, ExxonMobil and Mobil. They make the products that drive modern transportation, power cities, lubricate industry and provide petrochemical building blocks that lead to thousands of consumer goods.

**GE Appliances** designs and builds the world's best appliances. From design to production to service, their goal is to help people improve their lives at home.

**Ed Miniat** produces custom-formulated, sous vide-cooked beef, pork, chicken and turkey for global food brands and national restaurant chains. Award-winning chefs, meat scientists, and experienced sales team will partner with you to find the ideal solution for your needs, components and technology.

**ATA** is a leader in modal and dynamic aerospace structure testing in the U.S. including the testing of military and commercial products.

**Carrier** is a world leader in high-technology heating, air-conditioning and refrigeration solutions. With more than 100 years of proven innovation, they have shown how they can solve problems on a global level and help drive new industries.

**Daimler** is one of the biggest producers of premium cars and the world's biggest manufacturer of commercial vehicles with a global reach. They provide financing, leasing, fleet management, insurance and innovative mobility services.

**Kimberly-Clark** has some of the most recognized brands in the world. Their brands hold the No. 1 or No. 2 shared position in 80 countries. They have five billion-dollar brands: Huggies, Kotex, Kleenex, Cottonelle and Scott. Additionally, they use sustainable practices to support a healthy planet and build stronger communities.





# SCHOLARSHIP RECIPIENTS

## Lenord E. Wood Scholarship



Established in 2007, this scholarship honors the memory of the late Leonard E. Wood. Wood received his PhD from Purdue University in 1956 and subsequently joined the faculty as a Professor of Civil Engineering. He then became the School of Civil Engineering's Faculty Coordinator for Purdue's Cooperative Education Program in 1989, a role he continued in until his untimely death in 2004. The scholarship fund exists thanks to a generous donation from Professor Wood's widow, Margaret, who sought to honor his dedication to the Co-op program while enabling the achievement of today's students. OPP has awarded 35 Wood Scholarships since 2007 including this year's recipients. The Leonard E. Wood Scholarship for Cooperative Education is awarded to deserving Co-op students based on academic merit and life-changing experiences brought about by the Co-op program. Cooperative education never had a greater friend, supporter or promoter, and no one better exemplified the Co-op value of practical education as a mentor, counselor and teacher.

- Damen Wilson**  
*Biomedical Engineering*
- Aman Chokshi**  
*Aeronautical & Astronautical Engineering*
- Omozafe Udegbe**  
*Biomedical Engineering*

William and Linda Nelson have been long-standing generous supporters of Purdue's Co-op Program. William (Bill) is a graduate from Purdue University in 1974 earning a BS, and a year later, MS in Chemical Engineering. Having over 40 years of industry experience, Bill has received many awards to honor his accomplishments. Most recently, he has been inducted into the 2013 Cooperative Education Hall of Fame as well as been honored as a 2017 Outstanding Chemical Engineer by Purdue University. An endowment fund was established by Bill and Linda for the creation of annual scholarships for co-op students. Additionally, incentive grants for instructors offering on-campus and/or online courses for Co-op students have been generated.

## William C. & Linda E. Nelson Scholarship



- Madison Bird**  
*Chemical Engineering*
- Rithika Athreya**  
*Chemical Engineering*
- Justin Groothuis**  
*Chemical Engineering*
- Christian Ibrahim**  
*Chemical Engineering*
- Ellen Van Daele**  
*Mechanical Engineering*
- Eleanor Clifton**  
*Chemical Engineering*

**TOTAL AMOUNT  
AWARDED  
THROUGH OPP:  
\$42,466.33**

## Employer Scholarship Fund

- Alex Ferrando**  
*Computer Engineering*
- Alex Dobbins**  
*Chemical Engineering*
- Matthew Kennedy**  
*Computer Engineering*
- Katherine Lindert**  
*Mechanical Engineering*
- Arunkumar Sundararajan**  
*Mechanical Engineering*

A new opportunity called the "Office of Professional Practice Employer Scholarship Fund" has been created.

One of the best ways to help students remember and recognize your company is to assist them with their education. The Office of Professional Practice will be awarding students with \$1,000 scholarships through employer gifts.

Purdue Professional Practice Ambassadors (PPA) is a student organization composed of co-op students working to enhance the awareness and experience of the cooperative education programs here at Purdue. They believe no higher education is complete without supplemental real-world work experience.

## Professional Practice Ambassador Scholarship

- Tommy Phan**  
*Chemical Engineering*
- Divya Sunderam**  
*Biomedical Engineering*
- Madison Bird**  
*Chemical Engineering*





# STUDENT ACHIEVEMENTS

The Office of Professional Practice is proud to recognize the students within our office who have worked diligently, both inside and outside of the classroom, for their achievements, experiences and awards.

## PAVING THE WAY FOR REMODELED INTERNS FOR INDIANA PROGRAM

SEAN RENWICK & KATHERINE JACOBS | NUTRAMAIZE



Sean Renwick, a Biological Engineering major, wrote educational blogs and developed recipes utilizing the company's milled products. Katherine Jacobs, a Communications student, was hired to take photographs, write blogs and develop videos the company can use for social media and other digital marketing platforms. Several of Renwick's recipes are featured on the company's website and Facebook page, and Jacobsen's videos appear on YouTube, Facebook, and Instagram.

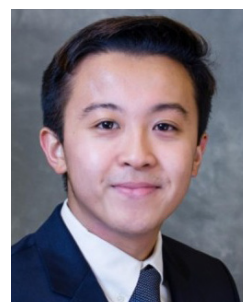
Both students agree the internships proved valuable to their professional growth. According to Renwick, "With this internship, I have discovered an interest in Food Science and a new understanding of what it is capable of achieving. Due to my new knowledge of the impact of Orange Corn on Vitamin A deficiencies in Africa, and the effect of Lutein and Zeaxanthin on American health outcomes, I

have a newfound appreciation of what Food Science can do and what I, as a Biological Engineer, could accomplish in this area." This academic year, Renwick will continue to explore his newfound interest in Food Science with NutraMaize through an NSF sponsored Research Experience for Undergraduates.

"I learned a lot about digital marketing for a start-up and the video production process, as well as about agriculture and the culinary arts," said Jacobson. "I have a wealth of content I am proud of and will add to my portfolio. I also enjoyed the independent, hands-on, and creative nature of the work. This internship helped me build my confidence in the workplace and significantly improved my videography skills. I feel optimistic about future possibilities as a direct result." Jacobsen plans to complete another internship with NutraMaize to earn additional credits toward her Communications degree during the Spring 2021 Semester."

## NICK MORI | MORTAR BOARD INDUCTEE

INDUSTRIAL ENGINEERING, GEARE



## BRENNAN BIRN | GEORGE ELWOOD RHOADS AWARD FOR OUTSTANDING SOPHOMORES FINALIST

MECHANICAL ENGINEERING, GEARE



## NATE NAUMAN | PARTICIPANT OF 27TH STUDENT SOYBEAN INNOVATION COMPETITION SPONSORED BY INDIANA SOYBEAN ALLIANCE

COMPUTER ENGINEERING, GEARE

## RILEY BARTA | FULBRIGHT U.S. STUDENT PROGRAM SEMI-FINALIST

MECHANICAL ENGINEERING, GEARE



## EMILY BYWATER | FULBRIGHT U.S. STUDENT PROGRAM SEMI-FINALIST

MECHANICAL ENGINEERING, GEARE

## ELIJAH HARRIS | GILMAN SCHOLARSHIP RECIPIENT

AERONAUTICAL & ASTRONAUTICAL ENGINEERING, GEARE



## SAMUEL HEATH | FULBRIGHT U.S. STUDENT PROGRAM SEMI-FINALIST

CHEMICAL ENGINEERING, CO-OP & GEARE

## HARRISON LIPPIE | FULBRIGHT U.S. STUDENT PROGRAM GRANTEE

CHEMICAL ENGINEERING, CO-OP



## DAMEN WILSON | ASTRONAUT SCHOLARSHIP NOMINEE

BIOMEDICAL ENGINEERING, CO-OP



# CO-OP ALUM SPOTLIGHT

KATIE DUDEK | CHEMICAL ENGINEERING



Katie Dudek graduated from Purdue University in 2020 with a Bachelor's Degree in Chemical Engineering. While at Purdue, she completed five co-op sessions with Proctor & Gamble in Cincinnati, Ohio. During her rotations, she worked on projects involving product and process development for P&G brands such as Pantene, Herbal Essences and Head & Shoulders. She converted process steps for several shampoo technologies for a new, more automated batch making system in order to reduce time and labor costs. She also worked on understanding the chemical mechanisms behind some shampoo discoloration issues and developed methods to predict discoloration failures. One of her favorite parts of her co-op experience was being able to work with other talented engineers, including many from Purdue, and being able to work on products that millions of people use every day.

Since graduating a year ago, she has been working full-time in the same area she completed her rotations in. She now leads New Product Introduction and Process Development for shampoos and conditioners in Latin America. This role is responsible for ensuring that any new product can be successfully made at the plant and will remain stable throughout its shelf life. Because this role is focused on the Latin America market, Katie gets to talk to more people internationally than domestically.

“

**The Purdue Co-op Program helped me immensely. I learned so many workplace skills so early on such as communication and how to navigate working in industry. I also feel like it built up my confidence as an engineer. I was able to transfer the skills I was learning in school to my work, but also the skills I was learning at work in school. Not to mention that getting paid while in school significantly reduced my student loan debt after graduation.”**

Since joining P&G full-time, Katie has joined the Purdue Intern and Co-op Recruiting Team. She states it is very exciting to be on the other side of the interview process and after speaking to many candidates as a recruiter, she has high hopes for Purdue's future co-op students.

# GEARE ALUM SPOTLIGHT

ZIHAN WANG | COMPUTER ENGINEERING



Zihan Wang graduated from Purdue University in 2020 with a Bachelor's Degree in Computer Engineering and with a minor in Japanese and Global Engineering Studies. During his time at Purdue, Zihan was a participant in the GEARE program. He was able to gain many different work experiences at companies such as CEC Controls in the U.S. and Kautex Tetron in Japan, Germany and the United States. Zihan also completed a semester of study abroad at Nanyang Technological University in Singapore. During the GEARE program, Zihan enjoyed being able to travel around the world for an extensive amount of time. He also created many great connections and friendships during every part of his experience. In addition, he was able to improve his Japanese and even learn some German.

Currently, Zihan works for Nintendo of Europe in Frankfurt am Main, HE, Germany. At Nintendo, he is a Junior Bilingual Software Engineer.

He works in the Developer Relations and Support department where he helps developers outside of Nintendo bring their games to the Nintendo Switch. He also interprets Japanese and English in internal meetings between Nintendo of Europe and Nintendo Japan.

Additionally, he is focusing on game development using the Unity engine. He really enjoys being at Nintendo because he said “it's as cool as you think,” including many interesting people and projects.

He has enjoyed the international and welcoming feeling.

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**GEARE helped me a lot with my Japanese which helped me become a Bilingual Software Engineer. The GEARE internship in Japan was also my first time ever being there, so I really needed that to become comfortable speaking Japanese. I had the chance to get to know more about how what working in a Japanese company is like. This helped me with my daily interactions at Nintendo, especially when speaking with my colleagues in Japan.**

**I lived in Germany for a few months for an internship. Otherwise, I really wouldn't know what living in Europe would be like and would probably be a bit more hesitant about life here. Fortunately, I had that experience and now I'm living happily in Frankfurt!”**

Zihan stated that GEARE was probably as important to him as everything else he got from Purdue combined. He said that if he were to go back in time, he would choose to do it again at any moment. Zihan encourages current GEARE students to make friends as he wishes he would have made more during his time in the program.



