

2018 | 2019 Donor Impact Report

Joy of Giving



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Thank you from the Dean

It doesn't take long to discover that the College of Engineering has its own unique sense of community that stretches well beyond our building and our campus. I know it makes our college stronger and it's something I'm very proud of.

As donors to the college, you're an important part of our community and we're grateful you're with us.

It's an exciting time to be part of the college. We're heading into the future with a sense of renewed purpose. We are training the resourceful, hard-working engineers the world needs. And our research is addressing important problems to help build a strong future for Saskatchewan.

Your gifts support this work. Scholarships allow capable, engaged students to forego part-time jobs. Equipping our new virtual reality lab with the latest hardware and software puts our college on the forefront of engineering education. Supporting our award-winning student groups helps them thrive, so we continue to be known as an engineering school where each student can find their place.

These things happen because of your generosity. Thank you.

Dr. Suzanne Kresta, PhD, P.Eng., FEC Dean, College of Engineering

"You're an important part of our community and we're grateful you're with us."



You make a difference

You've given us over a million reasons to say thank you! Every dollar you give impacts the College of Engineering's 2,179 students. They benefit from high-quality instruction and hands-on learning and have the opportunity to work with faculty to make critical research discoveries. Wherever you designate your gift – you're making a difference.



THE GIFT OF A LIFETIME:

The legacy of six special alumni continues in the College of Engineering, as students will benefit from their bequests for years to come. We are grateful and humbled for their support.



Your generosity allowed the College of Engineering to make strategic investments in four key areas



6.3[%] Facilities

Enhances spaces and equipment used by students, such as the new Indigenous Resource Centre

^{24.1%} Research

Enabled high-quality research opportunities for students, including industry partnerships

37.8[%] Programs

Supports innovations like the ViRTCL Lab, where students test on-paper theories with new virtual reality software



Donor funds provide 433 college awards that support and inspire student engineers



In loving memory of Stan Nakrayko

Personalized award backs curious and driven USask student groups



Stan Nakrayko

Stan Nakrayko graduated with a University of Saskatchewan mechanical engineering degree in 1969 and worked as an engineer all his life. When he passed away in 2015, his wife Kathy, who earned her USask nursing degree in 1969, wanted to honour her husband in a personal way.

"Stan grew up doing things with his hands and he liked to be practical," Kathy says. "He said he was great at taking things apart as a child, and I asked him, 'Did you ever put them back together again?' and he said, 'Well, not always!'"

Stan Nakrayko's pragmatism inspired Kathy to create the **Stan Nakrayko Engineering Extracurricular Student Group Project Support Fund** in 2018. It supports student design teams that link mechanical engineering to teamwork. In 2018 and 2019, it backed the Aero Design Team, Huskie Formula Racing, the Steel Bridge Design Team, and University of Saskatchewan Space Design Team.

"If this is the next generation, we're in good hands!"

Kathy says, "I thought Stan would have really appreciated that students would take initiative and go above and beyond what they had to do to graduate. He admired people with a lot of curiosity."

In March 2019, Kathy Nakrayko met the student groups supported by Stan's fund. "It was gratifying to see what they were doing and how the funds were put to use. I came away with a sense of, 'Wow! If this is the next generation, we're in good hands!'"

She muses, "I think Stan would be pleased. He was a good engineer. I think he would have appreciated what we're doing and how we've chosen to remember him."



Bursaries help grad earn degree and gain clarity

Adam Lozinsky is humbled by the generosity of alumni

"When I decided I wanted to return to school, I carefully budgeted for my expenses over a four-year term. I saved and set aside all the finances I would need and a little more. In the end, I was unprepared for all the unforeseen costs that would arise.

If it were not for the kind bursaries I have received over the past years, I would not have been able to make it through my studies. It has been a hard road to travel. Yet, here I sit typing this letter and all I can do is smile. It was worth it!

Engineering has given me clarity. The clarity to know who I am, what I want, and how to get it. I love this work!

I am more than grateful, I am humbled and awestruck by the generosity afforded to me. Without the support given, I would never have found my calling, I would not know where I belong."

Adam Lozinsky, Engineering Physics, 2018 Recipient of the Class of 1962 Award *"Without the support given, I would never have found my calling..."*



A welcoming space



Your support of the **Dean's Fund** has empowered aspiring Indigenous engineers by helping to open a new Indigenous Resource Centre in the college. The centre is a dedicated space for students to connect and support each other as they work toward achieving academic success.

Dannielle Brewster is one of the Indigenous students who will benefit from the centre. A 2nd-year chemical engineering student who was raised in La Ronge, Saskatchewan, Dannielle works closely with the college's Indigenous People's Initiatives Community.

"This is what 1st-year Indigenous students need. It's hard coming from a small town. It is a little isolating – but here you can meet people similar to you, who can support you. Seeing other people makes you believe that you can do it and that there is support."

Your giving has created a stronger community for students like Dannielle, who feel welcomed, encouraged and supported in their new space in the University of Saskatchewan.

Thank you!



You make hands-on learning, collaboration and team success possible!

Having spent four years on the University of Saskatchewan Space Design Team (USST), I have had the privilege of seeing how it has helped students learn, develop and prosper in a welcoming environment. At the USST, we are fortunate to work on incredibly special projects many of us never imagined we'd have the chance to undertake. We could never do it without the help of you, our generous sponsors, so from the bottom of our hearts, thank you for fuelling the passion of more than 50 students!

- University of Saskatchewan Space Design Team

As part of the U of S Steel Bridge Design Team, we design and build a 1:10 scale model of a steel truss bridge, gaining valuable practical experience in steel design, drafting, computer modelling, construction technique, leadership and communication. Your support is key to helping us have the things we need to remain competitive. This includes quality tools, workspace, and strategic long-term partnerships with our industry. We are very grateful for your support as we grow and develop this new design team!

- University of Saskatchewan Steel Bridge Design Team

The Huskie Formula Racing FSAE team is proud of our accomplishments in 2018-19. We were 25th out of 116 teams at the FSAE competition in Michigan – the best of any Western Canadian team! We're especially thrilled that, for the first time ever, we completed every event in this challenging competition. Thousands of hours of work went into our car and our team wouldn't have been able to do it without you – our alumni, donors and sponsors – and our faculty support. The team has come a long way since its inception in 1997 and we are always striving for continuous improvement. Several team members say that being part of the Huskie Formula Racing team is a highlight of their undergraduate degree.

- Huskie Formula Racing FSAE

Thank you for supporting us along the way - you make this possible!



Research and industry partnerships – the foundation of capstone design projects

Your gifts have allowed our faculty to facilitate high-calibre capstone design programming and develop valuable industry partnerships. We highlight these in an important milestone event – the Undergraduate Design Showcase. With additional support from industry, we are able to provide prizes to top projects. The three projects featured here took home awards for best Industry Design, Environmental Impact and Social Impact.

Our capstone group investigated how to integrate reclaimed asphalt pavement and recycled plastic waste into an asphalt mix design for Highway 11 south of Saskatoon. Our group was immediately drawn to this project, as it gave us a little taste of everything – materials testing, infrastructure design, economic analysis and more. The experience tested our ability to problem solve, work effectively as a team and think outside the box – all extremely important lessons. We can't thank you, our industry partners, enough for all of your generous support. This project has provided us with invaluable experience that we will use in our future careers and we are extremely thankful for that.

- Civil Engineering Reclaimed Asphalt Capstone Design Group, Industry Design Award





We picked our capstone project, the low-cost IV pump, because of our shared interest in working with medical devices and the possibility of a positive, impactful outcome. We incorporated a large range of engineering fields into the project, integrating mechanical and electrical systems while following machine design principles and designing our pump mechanisms with the relevant fluid mechanics as well. Now, two of our members will travel to Mozambique this summer and work to incorporate our pump into the medical environment there, which is in need of this solution as it is greatly impacted by flooding and malaria. Thanks to the awards we received from you, we will be able to further develop our project.

-Mechanical Engineering Low-Cost IV Pump Capstone Design Group, Social Impact Award

Our capstone team was tasked with designing a stormwater management system for a new green development proposed just southeast of Saskatoon. The project was challenging due to its complexity, as we needed to use various civil engineering design approaches, be aware of environmental impact risks and incorporate vegetation into a new type of stormwater management system not yet tested in Saskatoon. With your support, the Undergraduate Design Showcase allowed us to not only show off the fruits of our labour, but reinforce and defend our designs and be confident in our efforts. We are very grateful we were part of this event. It was filled with bright minds and creative spirits – showcasing the future of engineering and engineering design.

-Environmental Engineering Stormwater Management Capstone Design Group, Environmental Impact Award





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