

# ENGINEERING

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12 | SPRING 2018

ENGINEERING GRADUATES

**HELP  
SHAPE  
IDEA**

ALUMNI WORKING BEHIND THE SCENES  
ON SEXTON CAMPUS RENEWAL





# Dean's Message

**IT IS WITH SOME SADNESS** that I write my last Dean's letter for the Engineer. It has been a privilege to serve as Dean of the Faculty of Engineering at Dalhousie for the last thirteen years. One of the best parts of this job has been meeting our alumni. I've heard hundreds, if not thousands, of fascinating stories about your projects, your travels, your successes and failures, and ultimately how your time at TECH/TUNS/DAL shaped your future. All of these conversations have reinforced my belief in the importance of what we do at Dalhousie.

Dalhousie Engineering has evolved tremendously since 1907, when the construction of Sexton Campus began. The last few years have seen amazing growth. Perhaps most notably, our student population has doubled since 2005. By July 1, virtually the entire campus have undergone a renewal, with both new construction and rebuilds.

Progress does not happen without the support of our alumni. Your success is our reputation and your support is what allows us to move forward. I want to take this opportunity to thank all of you for your support. Whether it's through attending our events, mentoring our students, donating to our projects, or volunteering your time, your contribution makes a difference.

I look forward to the next phase of my life at Dalhousie as a professor in electrical and computer engineering (after my very first sabbatical, which starts July 1, 2018). Our new dean, Dr. John Newhook, comes with an outstanding track record as a teacher, a researcher, and an academic leader. He has some exciting plans for the Faculty which I hope to be a part of.

In closing, thank you all for your support and I look forward to seeing you in the not too distant future.

Josh



## ON OUR COVER

IDEA Project Campaign: Meet two Dal Engineering Alumni who are helping with the transformation of Sexton Campus

## CONTRIBUTORS

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# Introducing Dr. John Newhook



**“IF WE CAN ENCOURAGE STUDENTS FROM NOVA SCOTIA AND AROUND THE WORLD TO COME HERE, AND PROVIDE THEM WITH AN EXCEPTIONAL, INNOVATIVE LEARNING EXPERIENCE THAT CREATES OPPORTUNITIES FOR THEM, WE CAN INSPIRE THEM TO STAY AND LAUNCH CAREERS OR BUSINESSES IN NOVA SCOTIA. THE IMPACT OF THAT WOULD BE TREMENDOUS FOR OUR REGION.”**

Each day, Dr. John Newhook (DipEng (TUNS)'86, BEng (Civil) (TUNS)'89, MAsc (TUNS)'93, PhD (TUNS)'97) looks out his office window and marvels at the progress being made on the IDEA Project Campaign.

“It’s really exhilarating,” says Newhook, a Professor in the Department of Civil and Resource Engineering and the Director of the Centre for Innovation in Infrastructure within the Faculty of Engineering.

“For 111 years, this campus has been the province’s engineering school, always focused on how it can serve the needs of industry and the community through its programs, research, and dedication to innovation. Just knowing that we will have these new facilities and be able to build on that legacy makes this a time of opportunities and excitement.”

As the incoming Dean for the Faculty of Engineering, Newhook is looking forward to capitalizing on the

opportunities the IDEA Project will create for enhancing learning experiences, increasing research activity that benefits the community, generating more contributions to regional development, and offering more support for students from diverse backgrounds to thrive.

“The student experience, in particular, is really important,” Newhook says. “We can’t just think about it as ‘Did we teach them well while they were in the classroom?’ What they gain here must go beyond training. It has to be about providing ways for them to succeed, and the IDEA Project Campaign gives us a good start in fulfilling that.”

Continuing to build Faculty of Engineering research is another significant priority for Newhook. “Over the past decade, Engineering has grown its reputation for excellence in research and expanded its research activity,” he says. “The current campus development project is creating much needed state-

of-the-art labs. We need to create more opportunities for growth in research-related resources to foster an environment of excellence and innovation in which our faculty and students succeed.”

Newhook’s use of ‘us’ and ‘we’ reflects his belief that the ability to achieve such goals rests not in the actions he takes as an individual but in his ability to engage everyone—students, faculty, community stakeholders—in the effort.

“It starts with dialogue,” Newhook says. “I want to build an understanding of what we’re trying to achieve, so that we can make decisions and take actions together that move us forward. It means constant interaction, which takes considerable time and energy, but the reward is that we energize people who want to be part of this, and who feel like these goals belong to them.”

In leading the faculty into the future, Newhook will be drawing on his experience not just as a Dalhousie alum and professor but also his administrative roles with the university, having served as Acting Vice President Research, Associate Vice President Research and Head of the Department of Civil Engineering.

“I have a strong sense of how the faculty has evolved over the years, both from my time here and when I was engaged as an industry partner in research,” Newhook says. “I also have an understanding of Dalhousie’s mission and how the faculty can support that as we grow. Based on that, I think I have the ability to balance needs, prioritize objectives, and make decisions in a consistent, transparent, and beneficial way.”

For the immediate future, Newhook’s focus is on getting the IDEA Project facilities up and running. Yet, he is already thinking about an outreach initiative to build interest in engineering as a career option.

“If we can encourage students from Nova Scotia and around the world to come here, and provide them with an exceptional, innovative learning experience that creates opportunities for them, we can inspire them to stay and launch careers or businesses in Nova Scotia. The impact of that would be tremendous for our region.”

# Making the most of a **BIG IDEA**

The IDEA (Innovation and Design in Engineering and Architecture) Project Campaign is in its final stretch, having raised approximately 90 per cent of its fundraising goal to date. Generous support from alumni, friends, government, and corporations has been vital in helping us achieve our goal and ultimately launch a new era in engineering education at Dalhousie. Here are some of the ways that our alumni and partners are bringing the IDEA Project to life:

## **IRVING OIL FUELS IDEA PROJECT**

In August 2017, Irving Oil announced a generous \$2.2 million gift to the Faculty of Engineering. The contribution is designed to enhance the entire student experience, from the first day on campus through to graduation and beyond. It supports new infrastructure and financial awards while cultivating a culture of safety among engineering students.

The investment includes \$1.5 million for the IDEA Project's new 450-seat Irving Oil Auditorium. This state-of-the-art learning space will also serve as a community resource, available for public presentations, performances and lectures. Additionally, more than \$700,000 will support high-performing engineering students who've completed their second year of studies. Besides providing 10 scholarships of \$7,500 annually, the 10-year commitment includes a co-op placement with Irving Oil for each recipient.

"As an Atlantic Canadian company, committed to our communities, we know that our young talent and future leaders want to stay here — provided the opportunities exist," says Mark Sherman (BEng (TUNS)'83), vice-president and chief operating officer with Irving Oil and a Dalhousie Engineering alum through the Nova Scotia Technical College.



*Left-to-right: Irving Oil President Ian Whitcomb, Irving Oil Chairman Arthur Irving and Dalhousie University President Dr. Richard Florizone. Photo taken at Irving Oil announcement on Aug 21, 2017.*

"Building that dynamic, innovative regional economy starts here at home by investing in our higher education."

"The Dalhousie Faculty of Engineering is an important source of young graduates for our company – their success helps ensure our success," says Irving President Ian Whitcomb. "We're delighted to be supporting the creation of this centre of excellence in our region."

Dalhousie University President Dr. Richard Florizone says Irving Oil is known for its commitment to strengthening Atlantic Canada by investing in people, building special communities where they operate, and by supporting higher education.

"Today, we're celebrating Irving Oil as a dedicated partner, generously providing opportunities for our Dalhousie engineering students," he says.

"With this gift, we are happy to support the Faculty of Engineering at Dalhousie University, knowing we look to Dalhousie and other Atlantic Canadian universities for our best employees at Irving Oil," says Arthur Irving, chairman of Irving Oil. "Atlantic Canada's success depends on the quality and skill of our

youth — and we know Dalhousie is up to the challenge."

## **GASTOPS FOUNDER SUPPORTS STUDENT SUCCESS**

Growing up on a farm near Antigonish, Bernie MacIsaac (BEng, NSTC'70) had no idea he'd one day build a successful company recognized for innovations in systems engineering. Now, the founder and former CEO of Gastops is making it possible for a new generation of engineers to succeed with a leadership gift to the IDEA Project Campaign.

MacIsaac and his wife, Ann, have directed their campaign gift to fund a student lab and to establish a scholarship in Dr. Roland Gagne's name. Dr. Gagne served as MacIsaac's boss and mentor at the National Research Council (NRC) when MacIsaac worked in NRC's analysis laboratory.

"For Roland, every problem had a solution, as long as you broke it down into bite-sized pieces," MacIsaac says. "This remarkable individual made me

a better engineer. I wanted to honour this extraordinary scientist and dear friend, and what better way than by giving others the same kind of chance I enjoyed."

Maclsaac, who earned an honours degree (Manufacturing) at the Nova Scotia Technical College, hopes his gift will encourage students to pursue their academic and career goals.

"I consider myself extremely fortunate," says Maclsaac. "I came from absolute poverty but succeeded in getting my engineering degree, which set the course for the rest of my life."

## ENGINEERING ALUMNI TAKE THEIR SEATS

Over the years, the Sexton Campus has made its mark on thousands of graduates. Now, alumni are coming together in a big way to make their mark on Dalhousie University through the We Saved You a Seat Campaign.

Launched in 2017, the campaign offers Engineering alumni an opportunity to name a seat in the new Irving Oil Auditorium. Class of '64 alumni Bob Gillespie and Stephen Leahey are not just buying seats; they have become Class Champions, mounting a spirited effort that asks classmates to make an investment in future generations of engineering students.

"The IDEA Project strikes me as a huge step forward for technical education in Nova Scotia," says Gillespie, who has purchased a seat for each member of his family.

"This campaign seemed to be a great way to fund this initiative and engage alumni in the effort, and I wanted to be part of it."

More than 20 Class Champions have stepped up to support the campaign to date, and they have developed something of a friendly rivalry to see which class will name the most seats. So far, Gillespie and Leahey have put their class in the lead with 21 seats claimed as of January 15, 2018.

"We've worked off each other in terms of ideas and enthusiasm to convince our classmates to come on board," Leahey says of his partnership



*Left-to-right: Dr. Roland Gagne and Dalhousie Engineering Alum Bernie Maclsaac. Photo credit to Jessica Deeks.*

with Gillespie. "We've wanted to evoke a sense of sentiment and remind them of the help we received from our community when we were students. We drew upon a sense of obligation to give back for the blessings we received through our education. Without that approach, and our team effort, we would never have done as well as we have."

Gillespie and Leahey have been encouraged by the response from their classmates to date and continue working to maintain their lead, but neither would mind being outpaced by any of their rivals. It is that kind of dedication that Dr. Joshua Leon, dean of engineering, says has made the campaign a success, and he expects all the seats will be named by April.

"The IDEA Project is going to make history, and alumni are coming forward to be part of it," Dr. Leon says.

"There is real excitement that this will be a turning point for engineering education at Dalhousie and help kick-start Halifax's emerging innovation district." If you would like to name a seat, go to [giving.dal.ca/wesavedyouaseat](http://giving.dal.ca/wesavedyouaseat).



*Top: Robert Gillespie, below Stephen Leahey*

## WE SAVED YOU A SEAT



# CONSTRUCTION UPDATE – FEBRUARY 2018

EMERA IDEA BUILDING

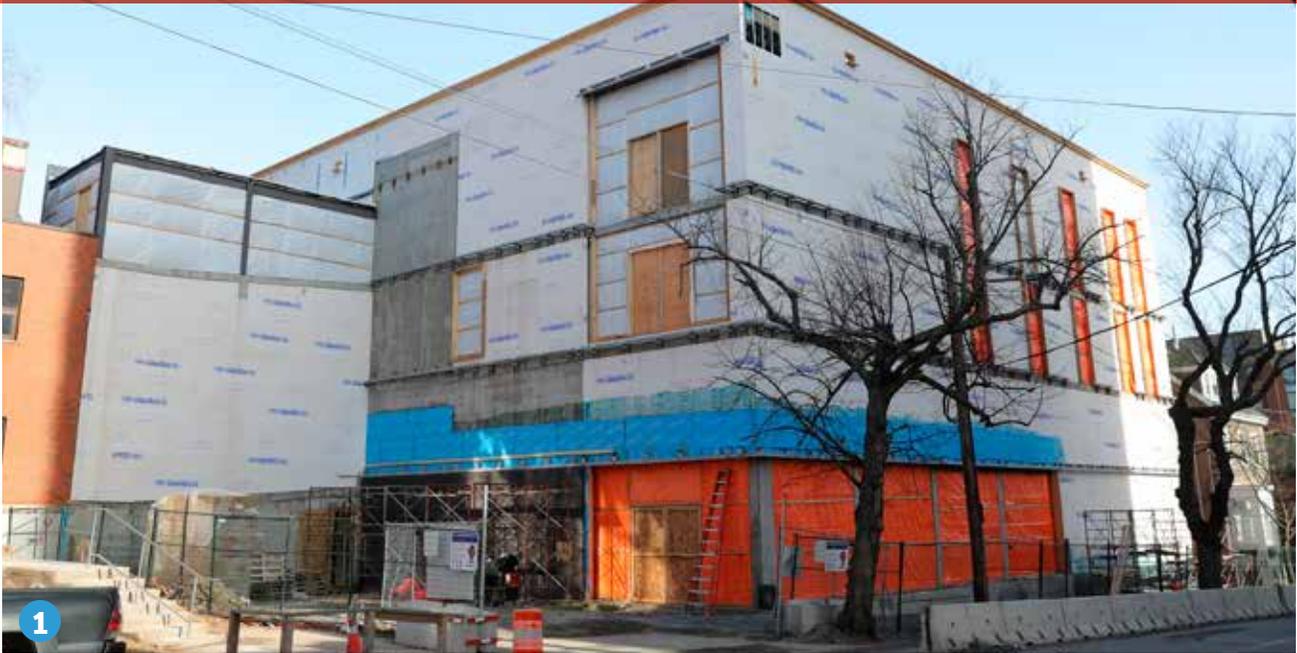


▲ EMERA IDEA BUILDING

- 1. An aerial view.
- 2. An street-level view from Morris Street.
- 3. The atrium is taking shape.
- 4. Future home of the Emera ideaHUB.

CLEAN TECH HUB





1



2



3



4



▲ **DESIGN BUILDING**

1. The view from Morris Street.
2. Looking up the stairway from the main entrance to the mezzanine level.
3. The Lindsay Design Commons.
4. With the roof in place, the third floor is shaping up.

▶ **CLEAN TECH HUB**

1. Level 1 – the new multi-purpose teaching lab is almost complete, and being used to store supplies.
2. Level 1 – fresh, new lab space for researchers and graduate students.
3. Level 2 – offices for faculty and students are nearly finished.
4. Level 2 – the second-floor hallway with trim painted in TUNS blue.



3



2



4

# Engineering Graduates Help Shape IDEA

**IN FALL 2016, AN AMAZING TRANSFORMATION BEGAN AT DALHOUSIE UNIVERSITY'S SEXTON CAMPUS AS GROUND BROKE ON THE IDEA (INNOVATION AND DESIGN IN ENGINEERING & ARCHITECTURE) PROJECT.**

The \$64 million development initiative represents a bold new future for the faculties of Engineering and Architecture & Planning. When completed, it will not only revitalize Sexton Campus, but also transform it into the heart of Halifax's emerging innovation district. There will be two new modern structures—the Emera IDEA Building, which will feature student-centred workshops and the Emera ideaHUB, a creative and entrepreneurial accelerator space; and the Design Building, which will include the 450-seat Irving Auditorium, the Lindsay Design Commons and four new design studios for Architecture & Planning students. The project will also see the renewal of existing facilities to create three major research hubs focused on clean technology, advanced manufacturing and ocean technology.

This is a significant undertaking for Dalhousie, one that leverages the university's legacy of innovation in education, collaboration, research, and commercialization, and it has been made possible in large part by the many Engineering alumni who have embraced the effort from the start. Inspired by the vision and the promise of the IDEA Project, graduates have contributed advice, expertise, and financial assistance at every stage to ensure the next generation of students receives the necessary education, support, and opportunities to succeed and innovate. Yet there are two alumni in particular who are playing a key role behind the scenes



*Julia Cairns (BEng '95)*

— Julia Cairns, (BEng '95) and Randy Giffin (BEng '81). Both are drawing on their own Dalhousie experiences to bring this project to life.

## **JULIA CAIRNS**

When Julia Cairns stepped into the role of Senior Construction Manager in September 2016, she felt a mix of emotions about transforming the campus where she earned her Civil Engineering degree.

“Coming back to my school, knowing that I'd be working with people with such high credentials and who were my professors, it was exciting and daunting at the same time,” says Cairns, who is overseeing the construction of the Emera IDEA and Design buildings.

“I'm coordinating with the architects, the construction managers, and the faculties that will occupy these new buildings. In the case of the Emera IDEA and Design Buildings, the designers are DSRA Architecture and the construction management team is J.W. Lindsay Enterprises Ltd. I work

with and manage the two teams to help Dalhousie get the best we can with the resources we have.”

Driven by a desire to be on-site and hands-on in her profession, Cairns started her career in 1995 at Fraser-Brace, working on the QEII Health Sciences Centre.

“After graduation I always knew that I wanted to be on-site and in the middle of the construction,” she says. “I enjoyed the thought of planning a job, developing a schedule, working with the trades, controlling the costs of the project, and monitoring those components of the project all the way to the end.”

She subsequently worked on a series of infrastructure projects in the United States, never imagining that her career would lead her back to Dalhousie one day. Now that the project is well underway, she is eager to see how it will impact the education students receive.

“When these buildings are complete, the campus is going to be modern, but hold its historic views and monuments,” she says. “Students will have the opportunity to see all the different



Randy Giffin (BEng '81)

disciplinary components that come together to form the whole structure. All of those aspects would make their studies more interesting because students will see the work they'll be doing in the future."

**RANDY GIFFIN**

On the other side of Sexton Campus, Randy Giffin, Construction Project Manager with Pomerleau, is overseeing another aspect of the IDEA Project – the renovation to the Chemical Engineering Building (sometimes called F & P

Buildings). Pomerleau was contracted by Dalhousie to oversee administrative and technical management of the project, in which the space was stripped down to the bare brick walls and then completely rebuilt, with a new steel roof that was installed in stages.

"If you saw the Chemical Engineering labs before we tore them apart and could compare them to what they're going to be, you'd agree that it's a phenomenal change," he says. "They are going to be state-of-the-art labs for the researchers, for teaching, and for master's students."

Giffin's involvement seems almost

destined when you consider his family's long-standing ties to the Faculty of Engineering. "My father, brother, three cousins, and two uncles are graduates of this school," he says. "My father owned a construction company and worked as an engineer, so it was kind of inevitable I'd become an engineer. In fact, my father actually helped build the D Building here on Sexton Campus."

In that way, Giffin is carrying on a family legacy, and he is excited to be part of Dalhousie's expansion and growth. Over the course of the project, he has noted how much the university has grown and changed since he graduated, exemplified in part by the engineering program's more diverse student population. He sees first-hand the impact that the IDEA Project is having, not just how it is enhancing Dalhousie's standing in the academic world but also supporting innovation, entrepreneurship, and economic growth in Nova Scotia.

"The future of our country is dependent on education and technology, and I think the IDEA Project will help attract more high-calibre students to study here," he says. "My hope is they will stay in Nova Scotia and help grow our economy. This was a very good school when I graduated, and I see it getting stronger, having more to offer, and making a bigger difference in our community."

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# Engineering alumni making waves in marine tech



It is no stretch to say that Dalhousie Engineering graduate students Mo AlGermozi (BEng'17) and Marciel Gaier's ship has literally come in.

The co-founders of Graphite Innovations and Technologies Inc. (GIT) have developed GrapheneCoat, an innovative, environmentally friendly marine coating that has the potential to significantly enhance the fuel efficiency and longevity of marine vessels. Product tests to date have demonstrated that GrapheneCoat not only provides superior protection against biofouling—the growth of marine organisms such as barnacles that cause friction between a ship's hull and water—but also delivers outstanding protection from corrosion.

“Current coating options on the market typically use a toxic-based solution,” says AlGermozi. “This means that they tend to leach toxins into the ocean, killing marine life. Our solution is carbon based, so there are no toxins, and

**“YOU COULD USE IT TO MAKE ANYTHING FROM SHOES TO COMPOSITES AND LUBRICANTS FOR THE AUTOMOTIVE AND AEROSPACE INDUSTRIES.” — MARCIEL GAIER**

it is manufactured to last longer, so we believe GrapheneCoat will offer a wide range of benefits for users.”

Perhaps the biggest benefit, according to Gaier, is the potential to reduce fuel costs associated with cargo ship transportation. “We ran a simulation for a 400-metre cargo ship on a 28-day voyage from Halifax to China,” he says. “The simulation suggested that the friction-reduction properties of our coating can deliver up to \$200,000 in fuel savings, and we hope to explore these benefits further through ongoing product research.”

Although it is still in the development phase, GrapheneCoat has generated considerable interest and investment since AlGermozi and Gaier launched

their company in 2017. Both the National Research Council and Innovacorp have stepped up with funding for research and staffing. Organizations such as the Port of San Diego and the United States Navy have approached the company about product applications. And AlGermozi and Gaier received an invitation to showcase GrapheneCoat to ocean technology investors at the prestigious BlueTech PitchFest in San Diego, California.

But AlGermozi and Gaier say it is Dalhousie University that has provided crucial support for GrapheneCoat at every stage, helping them transform their classroom research on graphene production technology into a product with significant commercialization potential.

"Dr. Josh Leon gave us space to use for an office and product research," AlGermozi says. "We've partnered with Dr. Graham Gagnon at the Centre for Water Resource Studies to test GrapheneCoat's suitability for a variety of water-based applications, such as fish cages for aquaculture. And we've received invaluable advice and assistance in getting our business up and running through the Launch Dal program. I don't think we would have achieved as much as we have in such a short time without Dalhousie. It has provided the infrastructure and support at every stage for us to move forward."

AlGermozi and Gaier are wasting no time in doing that. They plan to finalize R&D for GrapheneCoat, commercialize it, raise pre-seed funding, and rent a facility to begin production before the end of 2018. That's just for starters. Having also developed a proprietary process to produce graphene, they are considering other potential products beyond marine-related applications. The opportunities are virtually unlimited, according to Gaier.

"You could use it to make anything from shoes to composites and lubricants for the automotive and aerospace industries," he says. "We're going to be exploring these applications as we grow and we're really excited about what the future will bring."



Above: Mo AlGermozi; below: Marciel Gaier.



## 200th Anniversary ENGINEERING ENTRANCE AWARDS

**Nominate a female student (Grades 9 to 12) for a \$1,000 entrance scholarship to Dalhousie University's Faculty of Engineering.**

Nominations open until April 1, 2018

- Dalhousie University's Faculty of Engineering offers entrance scholarships to female students who demonstrate excellent academics and leadership in their community.
- Scholarships will be redeemed upon registration into Dalhousie's Faculty of Engineering.

To nominate a female student and learn more about Dalhousie's Faculty of Engineering, visit [dal.ca/engineering](http://dal.ca/engineering).



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# Entrepreneur is **making a difference** in India and at Dalhousie



*Ajith Rai (MAsc'84)*

When Ajith Rai completed his engineering degree in India in 1981, he did not immediately start looking for a job. Instead, he began exploring opportunities to continue his studies abroad to see how his knowledge and skills measured up.

However, Rai faced a serious challenge. His father had covered the cost of his degree but there were no resources available for airfare to another country, let alone Rai's post-graduate studies.

"I started writing letters to universities to see if they had scholarships and assistantships," Rai recalls.



*Suprajit Engineering Ltd. in India.*

**"IT WAS IMPORTANT TO RECOGNIZE DALHOUSIE FOR ALL IT HAS GIVEN ME, BUT I ALSO WANTED TO HONOUR ELDON AND WHAT HE DID FOR SO MANY STUDENTS LIKE MYSELF," — AJITH RAI**

"There were a couple of possibilities, but had it not been for Eldon Gunn, I don't think it would have been possible to continue my education."

Gunn, an Industrial Engineering professor at the Technical University of Nova Scotia (TUNS), promised a full assistantship. "I don't really know what he saw in me," Rai says. "I think it was my perseverance. I wrote him every two weeks. But I was also the top student in my class, so that probably helped."

Now part of Dalhousie University, TUNS proved to be an eye-opening experience for Rai. His studies were less theoretical and textbook driven

and more individualistic and exploratory, and they also introduced him to the world of computer technology. But more important, Rai says, is how instructors such as Gunn shaped him.

"I think the most invaluable thing I learned was how to make mature, informed decisions that assess the pros and cons of any situation," says Rai. "But I also gained confidence, discipline, and a greater appreciation for hard work, and that has been vital in my success."

After returning to India in 1984, Rai put his Dalhousie education to good use, launching Suprajit Engineering Limited, which has become a world leader in



*Automotive products produced by Suprajit Engineering Ltd.*

the automotive cable industry. Through ongoing investment, he has built the business up to include several 100 per cent owned subsidiaries – Wescon (US), Suprajit Europe (UK), Trifa (Germany), Luxlite (Luxembourg), and Suprajit Automotive (India) – with more than 5,000 employees, and additional product lines such as halogen lamps and non-automotive cables.

“Just like then, I continue to look at the world and think, ‘How do we measure up?’” Rai says. “The goal is always to be just as good as anyone in the market,

if not better. That is how we’ve gained clients like BMW, VW, and Audi, and that has enabled us to make a difference for so many people—our employees, customers, suppliers, stakeholders—which I am proud of.”

It has also enabled Rai to make a difference in the lives of those in need. Through his own contributions and the Suprajit Foundation, a trust that manages Suprajit’s Corporate Social Responsibility activities, Rai is funding scholarships for 700 Indian students, providing lunches to hundreds of school

children, and maintaining a hospice for patients with late-stage cancer, among other initiatives. He has also given back to his alma mater. In 2016, he established The Eldon Gunn Memorial Scholarship, which is awarded to students who have completed their second year of engineering at any Canadian university, have demonstrated the potential to become outstanding industrial engineers, and are attending Dalhousie in the third, fourth, or fifth year of the Industrial Engineering degree.

“It was important to recognize Dalhousie for all it has given me, but I also wanted to honour Eldon and what he did for so many students like myself,” Rai says. “This scholarship is a way to continue his legacy, and I hope it makes many dreams and aspirations come true.”

After many years of hard work and success, Rai is thinking about what is next. For now, his plan is to continue his involvement in Suprajit while getting involved in more philanthropic investments and activities.

“I would like to focus more on improving education and healthcare in India, maybe even do something more for Dalhousie,” Rai says. “I believe in this life we should always do our best to give back whatever we can and make a difference. My father did that for me. Eldon did that for me. And they continue to inspire me to make the world a better place.”

## SCHOOL'S OUT. SUPERNOVA'S IN!

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*On September 14, 2017, nine graduates from the 1967 class of Industrial Engineering celebrated their 50th reunion. The group of alumni were the first graduating class of the department which opened its doors to students in 1965.*



*On October 13, 2017, The Faculty of Engineering welcomed over 100 alumni back to its campus for Homecoming 2017. As part of the day-long celebrations, there was a reception at the Lord Nelson Hotel to mark over 50 years of Industrial Engineering success.*

## CLASS NOTES

### 1950s

**John Vachal** (BEng (TUNS)'53) is enjoying retirement from Boeing (airplane design) in Seattle, Wash. Classmates may reach him at [jvachal@hotmail.com](mailto:jvachal@hotmail.com).

### 1960s

**Lloyd Hicks (BEng'60)** and **Eleanor (MacLeod) (Mt. A)** are happily retired and living in a gated retirement community in Guelph. Would be pleased to hear from former classmates at Mt.A., St. F.X. or TUNS. Email [ldeahicks@gmail.com](mailto:ldeahicks@gmail.com)

### 1980s

**Harold French** (BASC (TUNS)'84) is asking if anyone from the Mining class of 1983 and 1984 is out there?

**Youssef Abdul-Massih (BEng (TUNS)'89, MASC (TUNS)'91)** is currently the Consultant Project Director at Addis Ababa International Airport Project (Ethiopia) after being the Construction and Engineering Manager at Muscat and Salalah International Airports Project (Oman).

### 1990s

**Lori Andrews (BEng'99)** has joined Dillon Consulting Ltd. in Toronto as a Waste Management Engineer in October. Her main focus is on waste and resource planning and sustainable strategies for the municipal and IC&I sectors.





On September 13, 2017, the Faculty of Engineering hosted its ninth annual engineering golf tournament. Alumni and friends of the faculty gathered at Glen Arbour Golf Course for a full day of golf and dinner reception.

NSTC · TUNS · DAL ENG

# Tenth Annual Engineering Golf Tournament

Wednesday, September 12, 2018

GLEN ARBOUR GOLF COURSE  
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Co-hosted by  
**Sarah Devereaux**, BEng '93, MEng '99 (Civil)  
and **Geoff Moore**, BEng '97 (Industrial)

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