

# CEE Alumni News



COLLEGE OF ENGINEERING  
THE CHARLES E. VIA, JR. DEPARTMENT OF  
CIVIL AND ENVIRONMENTAL ENGINEERING  
VIRGINIA TECH.

2018



# THE GROVE OF SHARING

Trees have a varying abundance of gifts. Like most any institute of higher learning, the Via Department of Civil and Environmental Engineering largely depends on the gifts we receive from our alumni, students, faculty, and friends. These gifts help us achieve our goals in the areas of undergraduate and graduate teaching, research, and public service.

We have found a way for everyone to grow with us and to recognize those who generously give through our "Grove of Sharing" expandable tree sculpture that is beautifully displayed on the lobby wall of Patton Hall for all to see.

Eventually, each leaf on the tree will recognize every annual gift of \$250 or more by engraving the names of individual donors. Every gift makes a difference and enables us to do more, be more and give more to our students, our nation and our world.

Gifts provide critical funding for:

- Teaching
- Student fellowships and scholarships
- A distinguished lecture series and professional seminars
- Faculty and student achievements and awards
- Recruitment support
- Student chapter leadership
- Cooperative education activities
- ...and so much more



**AS OUR GIFTS AND FAMILY OF ALUMNI GROW,  
OUR TREE WILL BECOME A GROVE.**

Not only does the unique sculpture recognize our donors, but it becomes a part of the heritage of the Via Department of Civil and Environmental Engineering and will remain a centerpiece for many years to come.

Pledge to make an annual gift of \$250 or more and we will engrave the inscription of your choice on a leaf on the tree and you will become a part of the Grove of Sharing tree and the department's heritage.

Contact Sam Easterling at [seaster@vt.edu](mailto:seaster@vt.edu) to make your pledge today.



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# CEE

# ALUMNI NEWS

Via Department of Civil and Environmental Engineering  
Annual Newsletter  
2018

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Alumni Board Chair, 2017 – 2018  
Skip Notte

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Courtney Sakry

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**On the cover:** VT CEE alumni Young Ho Chang (1987) and his son Justin Chang (2017). Photo taken by Sandy Chang.

## Note from the Department Head

March Madness continues through the spring in the department as we are busy wrapping up another successful academic year here in the Charles E. Via, Jr. Department of Civil and Environmental Engineering. While our faculty and students continue to amaze us with their accomplishments, this newsletter serves as an opportunity to highlight the continuing successes of our alumni after graduation. One of the favorite parts of my job is interacting with many of our over 10,000 living alumni. These interactions range from working closely with members of the Alumni Board, meeting folks at departmental and university events, and having the pleasure each year of being part of recognition dinners for some of our distinguished and young alumni award recipients. I also enjoy getting out on the golf course with many of you during our alumni golf outing in Haymarket each summer. I want to call your attention to the updates, awards, and news of some of your colleagues – alumni of our department. I hope you enjoy reading about them!



**W. Samuel Easterling**

I specifically want to thank each of you for your continued support of our department through your time, expertise and financial donations. Each year, the career fair brings almost 100 companies to campus, many of which send alumni to help recruit. It continues to grow each year and is a highlight of the year for our juniors and seniors in the department.

Many of you also took part in the inaugural VT Giving Day which was held on March 20. The goal was to engage the community to advance the mission of the university while raising critical funding to ensure we continue to build upon our foundations to provide big opportunities for our students. You all went above and beyond that mission. The CEE department had a total of \$25,875 in contributions and the College of Engineering as a whole had 801 gifts that totaled over \$260,000. It is amazing to think about the difference that this will make in our student's experience as Hokies.

I encourage you to visit our website at [www.cee.vt.edu](http://www.cee.vt.edu) and follow us on Twitter at @VirginiaTechCEE. You'll find departmental developments on research, awards, student and faculty updates, and alumni highlights updated on a weekly basis. You can also connect with us on LinkedIn and Facebook.

I hope to see many of you on campus during the coming academic year. Please feel free to stop by the departmental office when you're on campus or to contact me by phone (540-231-6635) or email ([seaster@vt.edu](mailto:seaster@vt.edu)). I welcome the opportunity to catch up with those I know as well as meet those of you I don't know.

A handwritten signature in black ink that reads "Sam Easterling". The signature is written in a cursive, flowing style.

# Charles E. Via, Jr. Department of Civil and Environmental Engineering Alumni Board



Jessie Berg  
DC Land Development



Tom Broderick  
Arlington County



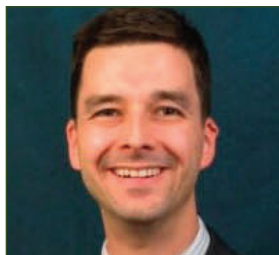
Young Ho Chang  
ATCS, P.L.C.



David Clarke  
VDOT



Bernie Deneke  
NAVFAC Atlantic



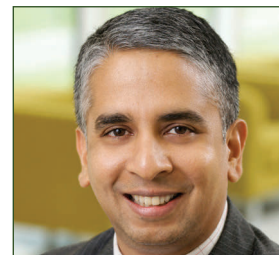
Brian Diefenderfer  
VDOT



Betsy E. Dulin  
38th ED, LLC



Martha Gross  
VDOT



Govi Kannan  
Volvo Group N. America



Charles Kilpatrick  
The Lane Construction  
Corporation

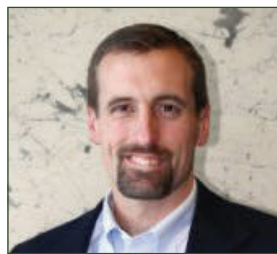
Vice Chair



Jeff Lighthiser  
Draper Aden Associates



Herb Morgan  
Retired  
(Fluor Enterprises)



Aaron Muck  
Terracon Consultants



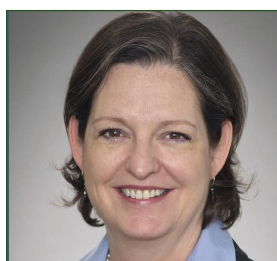
Skip Notte  
Dewberry  
Chair



Maysill Pascal  
Menard - USA



James Patteson  
Fairfax County



Ann Piazza  
L.A. Fuess Partners



Katherine Plasket  
Bechtel Power



Beth Turner  
Retired  
(Dupont)



Edward Westerman  
Clark Nexsen, Inc.



# Leaving a Virginia

“Everyone wants to leave some sort of legacy and there is little better than making sure tomorrow’s civil engineers can be even more successful than today’s engineers,” Mike Biscotte (‘80) noted as his motivation to give back to the department. “While there is certainly personal satisfaction from giving back, the real value is the fact that, as alumni, we are able to help students succeed as they start their careers, and support them throughout their lives.”

Biscotte has remained involved with the department since his graduation both through his monetary donations and his service. He is a frequent guest speaker to CEE classes, helps review ABET materials, and supports a scholarship that is given out on an annual basis.

While Biscotte lives locally and has continued to be engaged, many of our alumni don’t live in Virginia. In fact, Bruce Bates (‘79, ‘81) lives in California which kept him from being connected to the university for many years. Encouragement from a fellow alumnus allowed him

to join the advisory board, getting his foot back in the door with the CEE department. Now, he gives back philanthropically and also donates materials from his structural engineering software firm, RISA Technologies, for classes to utilize.

For Young Ho Chang (‘87), his motivation is to help both Virginia Tech civil engineering, but also the civil engineering profession as a whole. “If you look at the number of students nationally in civil engineering, there has been a drop in the last ten years,” he noted. “With all of the growing infrastructure needs in this country, it is very important for us to produce more civil engineers. I know Virginia Tech produces excellent civil engineers and I want to support the department to continue to do that.”

Among those excellent civil engineers is Chang’s son, Justin, who graduated last year with a B.S. in civil engineering. This has now allowed Chang to interact with the department as an alumni board member, parent, and an employer that frequently hires Hokies. He has seen all sides of the impact that giving back to the department can provide.

The main reason that many alumni choose to give back to their alma mater is to return what the university and department gave to them. Those include good memories with friends, life lessons learned, or just a love for the place where



Alumni Board member Jessie Berg (‘08) is an active member of the board and contributor to the department.

so many experiences happened and can continue to happen as an alumni. “Graduates of Virginia Tech all seem to have the same response. There is something very special about the Blacksburg and Hokie community and those four years were so memorable for me.” said Jessie Berg (‘08).

Biscotte agreed. “My educational experience from Virginia Tech civil engineering and my relationships with fellow alumni since graduation have been instrumental to my career success,” he said. “The strong academic technical background prepared me for my early consulting experiences as a design engineer and my later alumni interactions helped build my career and professional capabilities. The Hokie network is truly unique and powerful!”

With that alumni network spanning the globe, one way the CEE department encourages alumni to stay in touch is through social media. The department LinkedIn page has almost 2,000



Bruce Bates (‘79, ‘81) was inducted into the Academy of Distinguished Alumni in 2016 for his service and contributions back to the CEE department.

# Tech CEE Legacy

members that post jobs and ask career advice to other CEE alumni. The department Facebook page, which shares news and updates, has 2,473 followers and Twitter has 1,203 followers.

This year, Virginia Tech held the inaugural Giving Day to engage and encourage the community to help advance the mission of the university by raising critical funding to ensure that students can continue to be provided the best opportunities. The CEE community responded in a big way, raising almost \$26,000 for the department. The College of Engineering had 801 gifts given for a total over \$260,000.

So where do all of these donations go? Donations to the department strengthen our academic programs, support new research, and enrich the overall educational experience for our students. The donations are distributed in many different ways including scholarships for undergraduate and graduate students, funding student travel to conferences, lab equipment, research, and supporting student organizations, just to name a few.

"I genuinely care about the development and future of the CEE department that helped me navigate four critical years of my life and positioned me to have a successful and fulfilling career," said Berg. "Financial support

helps the department secure new and improve existing resources. My service to the department enables me, as an alumna, to stay engaged with world class students and faculty that are key components in making the department a top ten program in the nation."

For young alumni like Berg, her involvement with the department has allowed her to be surrounded by other accomplished CEE alumni and learn from the experiences they share. She used to think that her donations of time and money weren't enough to make a difference until she joined the board and learned how much of the faculty needs, program improvements and facility requirements are paid for by private donations. "I used to think that a small amount of money wouldn't make a difference," she said. "I wasn't sure if my donation was going to be used in a way that



Alumnus Mike Biscotte ('80) stays involved with the department as an American Society of Civil Engineers advisor.

I intended. However, it has never been easier to make donations to the CEE department specifically, or even directly to a certain program or initiative."

Chang added in, "I used to think I didn't have the time or the means to give back to the department. I thought it had to be a significant amount to make a difference, but the fact is, there are many ways to give and the best way is to start now."

If you would like to give back to CEE, visit our website at [www.cee.vt.edu/giving-to-cee/](http://www.cee.vt.edu/giving-to-cee/). You can designate money to go specifically to our department, or even to a specific project. All donations to the Virginia Tech Foundation are tax deductible.

Find other ways to get involved with the department at [www.cee.vt.edu/alumni](http://www.cee.vt.edu/alumni) for information on our annual golf tournament, how to become an E-Mentor to ASCE members, and how to connect with fellow alumni on social media.



## Russell Green receives Alumni Teaching Excellence Award

“My students’ success is my success,” said Russell Green, Professor of civil and environmental engineering. That teaching style is the reason why he was awarded the 2018 Alumni Teaching Excellence Award. He is heavily involved in international earthquake engineering research and seeks to lower the risk of damage from earthquakes worldwide. In fact, he is a frequent visitor to New Zealand to conduct research on past earthquakes to build a picture of the liquefaction risk in the region.

His hands-on experience resonates with students in the classroom. “He is knowledgeable about his courses,” stated alumna Rebecca Pinney (’17). “His

teaching style is great! He keeps lectures interesting and has a great balance of coursework.”

He prides himself on getting to know his students’ career goals to ensure that he is helping them to take the appropriate steps needed to achieve them. “His unselfish willingness to assist students at any time of day or night is a defining attribute of his professional persona and indicates a love of teaching and service,” noted alumnus Kevin Foster (’10).

Outside of the classroom, Dr. Green’s research focuses on fundamental and applied research in all aspects of earthquake engineering, paleoliquefaction analyses, seismic hazard analyses, ground motion selection and

scaling, and dynamic soil-structure interaction. He also serves as the graduate admissions coordinator for the geotechnical engineering program. He has a long list of accolades including the American Society of Civil Engineers Normal Medal, the Virginia Tech Alumni Award for Excellence in International Research, and the Visiting Erskine Fellowship from the University of Canterbury in New Zealand.



Russell Green receives the Alumni Teaching Excellence Award by CEE Alumni Board.

## Kyle Strom receives the G.V. Loganathan Award



Kyle Strom receives the G.V. Loganathan Award for Teaching Excellence

“Dr. Strom has helped me and guided me while I search to discover my passion and niche within the civil department,” said junior Ryan Gahman. “He is primarily a graduate advisor and professor, yet he has still taken the time to help me in my undergraduate work by meeting with me to discuss my future plans and even writing me a letter of recommendation for a research opportunity. Dr. Strom clearly cares about the well-being of every student no matter their position.”

Kyle Strom, Associate Professor of civil and environmental engineering, is a favorite among students for his charisma and interest in each individual student.

He teaches a wide variety of environmental and water resources classes including Fluid Mechanics, Environmental Fluid Mechanics, River Mechanics and Sediment Transport, Advanced Open Channel Flow, and Open Channel Flow. These all fall under his areas of expertise which include the study of flow mechanics, sediment and substance transport, and landscape change in rivers, estuaries, deltas and submarine fans. He conducts much of this research, along with a group of both M.S. and Ph.D. students, out of the Kelso Baker Environmental Hydraulics Laboratory (BEHL) in Hancock Hall.

Strom received his B.S. and M.S. from Washington State

University and his Ph.D. from the University of Iowa. Prior to joining the faculty at Virginia Tech in 2015, he was an Associate Professor at the University of Houston.

The G.V. Loganathan award is determined by a poll of current CEE students who feel that faculty affected their education in a positive way through teaching, research, advising, involvement with student organizations, or in other ways. The award was formerly known as the CEE Faculty Achievement Award, but the name was changed with unanimous support from the department in memory of Dr. G.V. Loganathan, who received the award five times during his tenure at Virginia Tech.



## Alumni Eric Bianchi and Casie Venable honored by ASCE

The American Society of Civil Engineers (ASCE) recognizes ten college students each year for their early achievements that set the way for an optimistic future in civil engineering. This year, Eric Bianchi, a graduate student in civil and environmental engineering at Virginia Tech, was selected for this honor. As part of this honor, he will receive recognition in several ASCE publications, a \$100 scholarship, and the opportunity to receive a \$1000 scholarship.

Eric also attended Virginia Tech and graduated with his bachelor's degree in civil and environmental engineering in 2017. He was involved in the Earthquake Engineering Research Institute, ASCE student chapter, Chi Epsilon Civil Engineering Honor Society, served on the Steel Bridge Team and as a CEE department ambassador. In 2017, he was selected for a senior spotlight in the civil and environmental engineering alumni newsletter for an app he created that provides real-time parking information at Virginia Tech. He was also chosen as the 2017 Outstanding Senior for the department.

“Eric is a passionate student who has an entrepreneurial spirit that he utilizes to challenge himself every day,” noted Academic and Career Advisor, Kara Lattimer. “His recognition by ASCE simply showcases his genuine interest in the profession of civil engineering and his desire to bring new knowledge to the field.”

As a graduate student, he is focusing on Structural Engineering and Materials. He is serving as a graduate teaching assistant for materials lab, teaching two lab sections of undergraduate students.

Originally, he wanted to major in chemical engineering, but was looking for a different work environment than that profession provided. “I like civil engineering because I can see what is being built. It is tangible,” he said.

His dream job following graduation is to pursue a career with a large engineering firm that works internationally. Specifically, he would like to work in earthquake engineering research or project management. He hopes his time in graduate school will help to solidify which of those options he would prefer.



Casie Venable ('16) was selected as one of ASCE's New Faces of Civil Engineering - Professional, which spotlights 10 young professionals who exemplify the future of the profession. She is currently a Research Assistant and graduate student at University of Colorado at Boulder. She is pursuing a Ph.D. with a focus in Civil Engineering Systems and Engineering for Developing Communities. Her research examines post-disaster housing.

“I was originally interested in civil engineering because of my belief in the power of the built environment to transform lives,” she said. “As I have completed degrees, I am more convinced of this transformative power, but I have also recognized how engineering projects can fall short, or worse, cause harm to those for whom they are intended.”

She has served as an intern at Thornton Tomasetti and Barton Malow Company, as well as a teaching assistant for Probability, Statistics and Decision for Civil Engineers and Reinforced Concrete Design classes. As an undergraduate student at Virginia Tech, she also served as a teaching assistant and was highly involved with Bridges to Prosperity, serving as the Las Violetas Project Manager. She continues to be involved at Virginia Tech by serving on the Presidential Global Scholars Alumni Board for the Virginia Tech Honors College.

Casie was named the Virginia Tech College of Engineering Outstanding Senior in 2016 and was a Marshall Scholarship Finalist in 2015. She is also a licensed engineer in the Commonwealth of Virginia, as well as serving as a member of numerous civil engineering and construction honor societies.

# VTCEE ATHLETES

succeed on the field and in the classroom

Being an athlete in college can be demanding on a student's time. Being a civil engineering major can be equally as demanding. Despite that challenge, the Charles E. Via, Jr. Department of Civil and Environmental Engineering has four varsity athletes that are able to manage the two successfully, while all maintaining over a 3.0 GPA. Their schedules may be hectic, but read below to see how these four student-athletes make it work.

## Zoe Foxhall - Women's Soccer

Junior Zoe Foxhall plays goalkeeper for the Hokies women's soccer team. In high school, her club team was frequently the national champion or the national runner-up, and the team was the 2012 and 2014 state champion. She earned first team all-state, all-region, all-county, and all-conference honors. All of those accolades led her to pursue collegiate athletics. However, while she is stopping goals on the field, she is pursuing her own goals in the classroom.

"Zoe was in my Introduction to Transportation Engineering course," said Assistant Professor Susan Hotle. "She was very proactive in planning the logistics of both academic and athletic obligations and always kept me informed when she would be missing class due to soccer."

After graduation, she wants to design runways or work in the transportation field.



## Nathan Hogye - Men's Indoor Track

Nathan Hogye, originally from Annandale, Virginia, has been clocking some fast times in 2018. Highlights of his season include a time of 50.70 seconds in the 400 meters, 22.83 seconds in the 200 meters, and a personal-best 49.65 in the 400 meters at the Clemson Bob Pollock Invitational. He has also served as a valuable member of the 4x400 meter relay team throughout the season. In high school, he was a four-year letterwinner at Annandale High School, so it made sense to continue that success as he moved on to college.

"I decided to major in civil engineering because I enjoy problem-solving and have an interest in the design process and construction of structures," Nathan said. "After graduation, I hope to work for an engineering firm involved with land development and construction."





## Rachel Pocratsky - Women's Cross Country and Track

Junior Rachel Pocratsky has been in the news a lot during this track and field season. She earned ACC Performer of the Week twice and also broke the school record in the mile at the Music City Challenge in February. She completed the race in four minutes and 34 seconds to place first in the event. That time is actually the 6th fastest nationally and first in the ACC. She also owns the record in the 1,000 meter race at two minutes and 41 seconds which is the fastest in the country.

Rachel competes on the cross country team as well, where she finished 51st at the ACC Championships with a 6k time of 21:38. That was a career-best for her at that distance.

"I've had Rachel in two courses that were very demanding of student's time," said Assistant Professor of Practice Kevin Young. "In Rachel's case, these demands were often magnified by her obligations outside of the classroom for training and travel. She has proven herself to be exceptionally motivated to stay on pace with her peers in class without additional assistance. I can honestly say that she is one of the hardest working students I have ever had in class."

Despite her numerous achievements on the track, Young added, "I have also found Rachel to be humble in regards to her athletic achievements. She usually blushes when I announce her latest record-setting achievement to her classmates."

## Heather Timothy - Women's Soccer

Coming into college, junior Heather Timothy knew that studying civil engineering and playing soccer would be challenging. However, she credits Virginia Tech for providing her with the opportunity to pursue both of her passions.

Heather is a junior who played in 11 games for the Hokies this season as midfielder. She scored the only goal in a tie over Pepperdine. She also played in numerous games as a freshman and sophomore.

Prior to attending Virginia Tech, Heather played club soccer where she competed internationally in Costa Rica, Germany, and the Czech Republic.

She was recently awarded the Skelton Award for Academic Excellence in Athletics, which is given to a student-athlete who has participated in collegiate athletics for at least two seasons and holds an overall grade-point average of 3.40 or better.

Following graduation, she hopes to work for a civil engineering firm that focuses on land development, but also noted that she would like to do something that helps children or is located abroad. Ideally, she can find a position that combines both interests.



# Alumni Achievement Awards Program

## Academy of Distinguished Alumni Class of 2018

Dr. Charles B. Bott  
Ph.D. 2001

Mr. James N. Carter, Jr.  
B.S. 1975

Mr. R. Bradley Chewning  
B.S. 1964, M.S. 1971

Mr. Michael C. Pietrzyk  
B.S. 1976

Dr. James A. Smith  
B.S. 1983, M.S. 1984

Mr. Douglas A. Sunshine  
B.S. 1977

Mr. James M. Wright  
B.S. 1960

### Outstanding Young Alumni

Dr. Sherri M. Cook  
B.S. 2008

Dr. Nicole Fahrenfeld  
Ph.D. 2012

Dr. Marina E. Vance  
Ph.D. 2012

These awards come from nominations submitted by our alumni. If you are interested in nominating someone for induction into the CEE Academy of Distinguished Alumni or Outstanding Young Alumni Award, please contact Courtney Sakry, Director of External and Alumni Relations, for the nomination forms. The form, resume, and cover letter can be completed via email to [csakry@vt.edu](mailto:csakry@vt.edu) or mailed with supporting documents. See page 11 for the nomination form.

## The Academy of Distinguished Alumni



Charles B.  
Bott



James N.  
Carter, Jr.



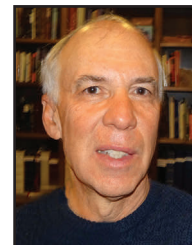
R. Bradley  
Chewning



Michael C.  
Pietrzyk



James A.  
Smith



Douglas A.  
Sunshine

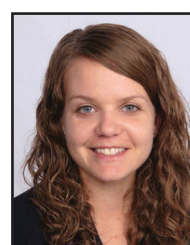


James M.  
Wright

## Outstanding Young Alumni



Sherri M.  
Cook



Nicole  
Fahrenfeld



Marina E.  
Vance



# CEE Academy of Distinguished Alumni

In 1998, the Via Department of Civil and Environmental Engineering and the CEE Alumni Board formally initiated the Alumni Achievement Awards Program as a means of honoring both younger alumni and those who have graduated from the department years ago.

Alumni may be selected for induction into the Academy of Distinguished Alumni based upon a review of their overall career accomplishments and contributions to the profession, their community, and service to Virginia Tech. Younger alumni (within 15 years of graduation with their B.S. degree) may be selected to receive an Outstanding Young Alumni Award.

Over the past years, 121 alumni have been recognized with this distinct honor.



## Nomination Form

Nominator Name: \_\_\_\_\_

Nominator Email Address: \_\_\_\_\_

Nominee Name: \_\_\_\_\_

Nominee Address \_\_\_\_\_

Degrees from VT CEE Department: \_\_\_\_\_

Date of Degrees: \_\_\_\_\_

Please include a letter of nomination to detail the accomplishments of the nominee that justifies his/her selection to the Academy of Distinguished Alumni. A copy of the nominee's resume or CV should also be attached. These and any other supporting documents can be emailed to Courtney Sakry at [csakry@vt.edu](mailto:csakry@vt.edu) or mailed to:

**Virginia Tech Civil and Environmental Engineering**  
200 Patton Hall, MC 0105  
Blacksburg, VA 24061



**The Charles E. Via, Jr. Department of Civil and Environmental Engineering seeks to:**

- Provide a high quality learning environment for students to gain fundamental and specialized engineering knowledge
  - Foster students to develop skills in critical thinking, communication, learning, and leadership
- Create opportunities for students and faculty to conduct basic and applied research that contributes to society by advancing sustainable engineering principles and practices
- Provide civil and environmental leadership and service to the state, the profession, and society at large

**#7**

U.S. News & World Report

Undergraduate Civil Engineering Program

**#7**

U.S. News & World Report

Graduate Civil Engineering Program

**#6**

U.S. News & World Report

Environmental/Environmental Health Graduate Program

**#10**

CEOWorld Magazine

America's Top 10 Universities for Civil Engineering

**#10**

Interesting Engineering

Best U.S. Colleges & Universities for Civil Engineering

## Program Areas

- Construction Engineering and Management
- Environmental and Water Resources Engineering
- Geotechnical Engineering
- Structural Engineering and Materials
- Transportation Infrastructure and Systems Engineering

## Department Totals

Faculty: 65

Undergraduate Students: 559

Graduate Students: 344



## Degrees Awarded in 2017

- 213 - B.S.
- 133 - M.S.
- 20 - Ph.D.

## Fundamentals of Engineering (FE) Exam Rates

Virginia Tech Pass Rate: 90%

National Pass Rate: 69%

\*As reported by NCEES from January-June 2017

## Scholarships

The CEE Department will award over **\$240,000** in scholarships to undergraduate students in 2018-2019.





# CIVIL ENGINEERING BY THE NUMBERS

**MEDIAN SALARY FOR SOUTHEAST REGION IS \$100,000**



## MEDIAN SALARY BY DISCIPLINE

<b>Construction</b>	<b>\$110,000</b>
<b>Utilities</b>	<b>\$108,000</b>
<b>Architectural</b>	<b>\$99,000</b>
<b>Environmental</b>	<b>\$99,000</b>
<b>Transportation</b>	<b>\$98,000</b>
<b>Water</b>	<b>\$98,000</b>
<b>Civil</b>	<b>\$93,000</b>
<b>Geotechnical</b>	<b>\$90,000</b>
<b>Structural</b>	<b>\$90,000</b>

**MEDIAN SALARIES FOR THOSE WITH:**  
**B.A./B.S. DEGREE - \$93,000**  
**M.A./M.S. DEGREE - \$101,000**  
**PH.D. - \$110,000**  
**P.E. LICENSE - \$108,000**



# Senior Spotlights



**Name:** Kirk Grant

**Area of Interest:** Geotechnical Engineering

Senior Kirk Grant grew up in Barbados and was around water all of the time. This sparked his interest at a young age to do civil engineering, specifically water resources engineering. However, after interning at a geotechnical engineering firm, he realized that was what he truly enjoyed. Following graduation in May, he will pursue that passion as a Geotechnical Staff Project Manager at ECS Limited.

That's his first step toward his dream career as a branch manager of a civil engineering firm. While many of his peers prefer the technical side of engineering, Kirk aspires to work in both the

technical and business sides of the profession.

“My other dream job would be a videographer and/or photographer,” he said. This passion of his is also what helped him step outside of his comfort zone when moving to Blacksburg. “I’ve done so many things I have never done before like hiking, snowboarding, concerts, and meeting a ton of people from different backgrounds.” As he moves into the work force following graduation, he hopes he can inspire future civil engineers to attend Virginia Tech, just as he was encouraged by friends and coworkers.



**Name:** Isabelle Stern

**Area of Interest:** Structural Engineering

When asked what her dream job is, senior Isabelle Stern replied “Honestly, the job I have for next year. I think I scored pretty well on the first one!” She will be starting a position at Simpson, Gunbertson & Heger in Chicago in September. “It combines all of my interests. I will get to do research, interact with contractors, and even scale buildings.”

Scaling buildings is appealing to someone with Isabelle’s sense of adventure. Prior to starting that job, she is running across the country to support the Oman Cancer Fund. Through this, she will run about 16 miles a day, while periodically stopping at cancer patient centers for service days. She’s been busy juggling class work and training this semester, but that hasn’t kept her from also being involved on the Concrete Canoe team, Dairy Club, the club field hockey team, Hillel at Virginia Tech, and serving as part of a team that helps to recruit females to engineering. It was that opportunity to be social and be involved that originally sparked her interest in attending Virginia Tech and that will continue to fuel her success long after graduation.

# Alumni Updates

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## 1960s

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**Thomas Davis Rust** – '65 – Honored with the 2017 ASCE President's Award

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## 1980s

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**Anne Ellis** – '80 – Appointed to the Structural Engineering Institute's Global Activities Executive Committee and Futures Fund Board

**Sanjeev Malushte** – '89 – Received the Stephen D. Bechtel Award for 2018

**Robert Taylor** – '82 – Working with the U.S. Army Corps of Engineers for the Government of Iraq on the Maintenance Grouting and Rehabilitation of the Bottom Outlet Project.

**Mark Unterkofler** – '87, '89 – Named Associate Vice President at Dewberry

**James R. Martin, II** – '87, '90 – Named dean of University of Pittsburgh's Swanson School of Engineering

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## 1990s

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**Steven Kuntz** – '99 – Named Vice President at Dewberry

**Paolo Scardina** – '97, '00, '04 – Presented with a Certificate of Teaching Excellence from the Virginia Tech College of Engineering.

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## 2000s

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**Kevin Young** – '00, '06 – Selected to receive a 2018 Certificate of Teaching Excellence by Virginia Tech's College of Engineering.

**Bryan Katz** – '00, '01, '07 – Received the Excellence in Transportation Engineering Education Award by the Southern District of the Institute of Transportation Engineers (ITE)

**Timothy Bayse** – '01, '04 – 2017 Engineer of the Year Award for the Pennsylvania Society of Professional Engineers

**James Bryant** – '01 – Awarded the Construction Engineering and Management Outstanding Young Alumnus for 2017

**Aaron Cheskis** – '03 – Named Associate at Dewberry

**Frank Homer** – '06 – Named one of ENR Regional's Top 20 under 40.

**James Racine** – '07, '08 – Named Principal at Engineering Consulting Services at ECS

**Joshua Joseph** – '08 – Named the Chair of the Department of Civil and Environmental Engineering department at Southern University.

**Mike Rowan** – '09 – Working with the U.S. Army Corps of Engineers for the Government of Iraq on the Maintenance Grouting and Rehabilitation of the Bottom Outlet Project.

**Mike Krieger** – '14 – Named Hokie Hero for the Virginia Tech vs. East Carolina University football game.

**Leslie Barksdale** – '14 – 2017 Professional and Community Engagement Award from the Danville Pittsylvania Chamber of Commerce

**Casie Venable** – '16 – Selected as one of 2018 New Faces of Civil Engineering - Professional

**Eric Bianchi** – '17 – Selected as one of the 2018 New Faces of Civil Engineering - College



James Bryant was awarded with the Construction Engineering & Management Outstanding Young Alumnus for 2017.



Robert Taylor and Mike Rowan in front of the Tigris River while on project with the United States Army Corps of Engineers.



Leslie Barksdale with Danville Pittsylvania Chamber of Commerce Chair Bert Eades



# Student Organization Updates 2018

## American Society of Civil Engineers (ASCE)

The Virginia Tech chapter of ASCE as been busy this year. Each month they invite a different speaker to their meetings that include alumni, industry professionals, or CEE faculty.

The competition teams had another successful Virginias' Conference.

- The concrete canoe team placed 2nd overall. The team was only one of two schools who correctly completed the structural analysis calculations. They were also frist place in the female rowing competitions.

-The steel bridge team had a progressive and sophisticated bridge design and their competition build time was very competitive. Unfortunately,

the bridge experienced a tension failure at a middle connection. Other teams in the competition experienced similar failures.

-Michael Kokal won the VA Section Thompson Award.

-Philip Smith won first place in the Marr Technical Paper for his paper "Cavitation Resistance of Nonleaded Alloys in Chlorinated Potable Water." He received a cash prize of \$500.

-Philip Smith also received an honorable mention in the Hardy Cross Technical Presentation for



the same paper.

-Virginia Tech remains a

leader with conference business at the event.

## American Railway Engineering and Maintenance-of-Way Association (AREMA)

AREMA is Virginia Tech's leading railway engineering



club to educate students about the multi-disciplinary opportunities and to connect them to employment and networking opportunities.

AREMA at VT seeks to educate students about the cutting-edge technology that goes into railway engineering and the rich history of this form of transportation. The chapter sponsored field trips to the Virginia Museum of Transportation and hosted a

variety of guest speakers from the industry. The chapter also hosts professional development events, allowing students exclusive opportunities for employment, including professional development seminars in preparation for various high-profile career fairs across the university.

Last November, AREMA hosted its first annual career dinner event exclusive to AREMA's 76 members. Highly

esteemed rail companies attended this dinner with the intention of interviewing prospective employees. This event went beyond a typical career fair by affording real interaction time by sharing a meal.

AREMA is open to all students and has opportunities for almost every engineering discipline. Meetings are held monthly, along with other chapter events.

## Alliance of Transportation Engineering Students (ATES)

The Alliance of Transportation Engineering Students (ATES) continues to drive engagement between students and professionals by hosting a variety of company information sessions throughout the school year. These sessions allow students to both learn from professionals and potentially begin employment conversations.

In March, ATES competed in its annual competition

against the University of Virginia. They won with a score of 9300 to 299. The traffic bowl is a jeopardy-style game with questions related to transportation engineering. The winning team will move on to compete at the Southern District meeting in Mobile, Alabama. The team was made up of Stephen Taylor, Sasha Redmon, and Rachele Del Rosario.

The traffic bowl was part of the Virginia Section of the

Institute of Transportation Engineers (ITE) spring meeting. Due to the successful turnout last time the VT chapter hosted, they got to host the meeting in Blacksburg again this year. Gerardo Flintsch and the ATES student chapter



hosted tours at VTTI, which was one of the favorite parts of the weekend for attendees.

# Student Organization Updates 2018

## American Water works Association (AWWA) and Virginia Water Environmental Association (VWEA)

Virginia Tech's VA AWWA/VWEA student chapter had a successful year of community participation, professional development and continued the tradition of winning. Members were engaged with the chapter's events throughout the year and brought in their Hokie spirit for all activities.

The year kicked off with chapter members participating in Virginia Tech's Big Event where they assisted local communities with service. The student design team won 2nd place at the 2017 VWEA Student Design Competition.

Distinguished experts in Wastewater Industry - Scott Shirley, Director of Wastewater operations for WV Water Authority, and Clarke Wallcraft, (Executive Director of Pepper's Ferry Regional Wastewater

Treatment, gave an industrial talk to chapter members.

Students continued their winning streak at VWEA/AWWA's annual event WaterJAM. The student winners were

1) YP Fresh Ideas Poster Competition: Shuai Luo - 1st place (wastewater category) Shiqiang Zou- 1st place (water category)

2) Digital Knowledge Presentation: Morgan Dicarlo-

1st place.

3) Virginia Tech Team #1 won second place at the student water challenge and the team members included Julia Byrd, Morgan Dicarlo, Divyang Baldota, Nevetha Ramesh and Anmol Vishwakarma.

Overall, WaterJAM was a great opportunity for members to network, learn and engage with professionals and also get involved with young professionals at the Young

Professional (YP) meet-up.

VA AWWA/VWEA continued the collaboration with student chapters of ASCE and EWRI/COPRI to organize a combined stream clean-up around the campus. This event helped chapter members to once again give back to the community. Students also attended AWWA webinars series that explored several current topics in the water industry.

Some new activities that we have been planned include engaging

middle-school students in a Water Tower Competition. The students will build a water tower to supply water to the local community. The idea is to educate students about water field while engaging them in a fun activity. We are also planning on organizing collaborative seminars, field visits, and socials with Western/Southwestern Regional Young Professional Committee of VAAWWA/VWEA.



Student members at WaterJAM 2016

## Chi Epsilon

Chi Epsilon is a recognized national honor society for civil engineering discipline. Members are selected based on recognition of their scholarship, character, practicality, and sociability, which Chi Epsilon considers to be the four primary traits of a successful engineer.

Chi Epsilon at Virginia Tech began to invite qualified candidates from the Construction Engineering

and Management (CEM) program area to join in 2017. In the fall semester, six new members were initiated to the chapter.

The VT chapter organized the annual senior CEE composite photos and they continue to offer free tutoring for civil engineering students in sophomore and junior level courses.

The group was also involved in an outreach

activity with a local elementary school in both the fall and spring semesters. This outreach included a brief presentation on civil engineering and a group activity where Chi Epsilon members and initiates guided students to design a bridge using educational software. The activity allowed the kids to learn about loads, member design, and cost.

The initiation ceremony will take place on April 24th and the officers are excited to welcome sixteen new members to Chi Epsilon.



# Student Organization Updates 2018

## Construction Management Association of America (CMAA)

The CMAA board members attended the CMAA 2017 Rising CM conference in Washington, DC. The conference explores the industry's hottest topics from technology to project delivery to sustainability and long-term competitive advantages.

The group also hosted lecturing series about interesting topics for construction management students. In the first one, J.R. McGinnis, Manager of the Geotechnical Department for Quanta Subsurface talked about foundations and risks

in the profession. The second was focused on virtual reality and the speaker was David Goldsmith, Assistant Professor of Practice in the Myers-Lawson School of Construction at Virginia Tech.

CMAA hosted a networking session with Turner so students could learn how leaders are transforming the construction industry. These same representatives attended the construction career fair so it gave students an opportunity to meet them prior to the career fair.

Steven White from Virginia Tech Career Services talked to students about job searching, networking, career decision making and mock interviews.

It was a very informative session with a lot of interest



from club members.

## Geotechnical Student Organization (GSO)

The GSO continued to interact with the community through outreach events in Virginia Beach, at Northside Middle School, and at Blacksburg Middle School.

The chapter traveled to Orlando, Florida for the 2018 IFCEE Conference where 23 students attended along with two geotechnical professors.

The members attended various lectures, technical sessions, and the graduate career fair. Students also had opportunities to network with professionals, equipment manufacturers, and students from other universities.

The annual CGPR meeting held at Virginia Tech was a success, with 26 student research presentations. The

meeting also included guest lectures and networking events.

While they always enjoy our time spent together in the Ozawa Library, they will continue planning activities in and around Blacksburg to get our most out of their time here at Virginia Tech.



## EWRI/COPRI

The EWRI-COPRI chapter had an exciting 2017-2018 academic year full of outreach and graduate student involvement. The fall kicked off by bringing in students new to the EWR graduate program and introducing them to what the chapter's mission is. The mission being to increase the professional and academic capital of its members as well as give back to the community and raise awareness of environmental, coastal, and water resources engineering.

Dr. Marcus Aguilar from the presented his research on the challenges of urban stormwater management, presenting his data from Roanoke, VA. This fostered a discussion on the difficulties of

stormwater management and the future of the practice.

The chapter hosted a social event at PK's. This was a great opportunity for new and old members to meet and share their experiences. The big outreach event of the fall was the annual stream clean on and around campus. The chapter partnered with the ASCE chapter and AWWA/VWEA graduate student chapter to pick up many bags worth of trash that had found its way into local waterways.

The chapter provided a wave flume demonstration for Kid's Tech University to illustrate the basic concepts of surface waves, tsunamis and erosions. For the first time, the chapter created a Big Event



team and participated one of the biggest community service projects.

Selected officers went to the COPRI Leadership Meeting in Washington D.C. to report on annual activities, network with chapter chairs from across the country, and bring back ideas. EWRI-COPRI offered \$1000 in travel scholarships to its members who traveled to present research, helping support the continuance of knowledge within environmental, coastal, and water resources engineering.



# Student Organization Updates 2018

## Earthquake Engineering Research Institute (EERI)

The Virginia Tech Student Chapter of the Earthquake Engineering Research Institute (EERI) has been hosting and organizing speaker events to continue to propagate interest on the impact of earthquakes on our physical environment. The biggest speaker event of the semester was Friday, April 6th as a part of the Friedman Family Speaker Series. Mr. David Cocke, a Virginia Tech alum and member of the CEE Academy of Distinguished Alumni gave a seminar on his philosophy

and strategies as a structural engineer.

Over the last year, the student chapter also formed the first team to participate in the Seismic Design Competition. The competition consisted of designing building a scale model of a high rise building out of balsa wood. The team took the model to the national competition in Portland, Oregon and subjected it to three different earthquake ground motions to validate the model's seismic performance.

This year, the second team will take another model to the national competition in Los Angeles, California. The design competition is a great opportunity for undergraduate students to learn about earthquake risk and network with students and professionals from all over the country.



## Structural Engineering Institute (SEI)

The SEI Graduate Student chapter at Virginia Tech is an active student organization that provides structural engineering graduate students the opportunity to develop technical and professional skills along with leadership qualities. It promotes student participation in technical conferences and student-industry networking sessions. It also provides students the opportunity to meet distinguished guest speakers from academia as well as from the structural engineering industry. Some of the chapter activities for 2017-18 included:

- The SEI-VT chapter supported a student trip to the third annual "The Next Step" event organized by the Structural Engineering Association of Metropolitan Washington (SEA-MW) held at Washington D.C. on 3rd November, 2017. The event provided students a great opportunity to meet professionals in the Structural Engineering field, interact and learn about the profession from them. Graduating students looking for jobs and internships got a unique chance of meeting professionals from local and global structural engineering firms. There was great

participation from the VT chapter as shown in the photo to the right.

- The chapter had the honor of hosting Dr. John Gross, formerly from the National Institute of Standards and Technology (NIST) on March 21 and 22. He delivered presentations on the collapse of World Trade Center Building 7 and failure of the Dallas Cowboys practice facility.

- The chapter hosted Mr. Don Dusenberry, former SEI President and senior principal at Simpson Gumpertz & Heger - Boston on April 4-5 to talk about forensic engineering and blast design.

- The chapter organized trip for 20 students to attend the three-day annual American Institute of Steel Construction (AISC) conference (NASCC 2018) in Baltimore, Maryland. The



conference provided exceptional educational and networking events for the students as it convenes over 3,000 structural engineers, structural steel fabricators, erectors and detailers. This conference is known as the premier educational and networking event for the structural steel industry and offers more than 130 sessions on a wide range of topics. It was a great opportunity for the students to attend and we hope to be able to continue to send students to this conference

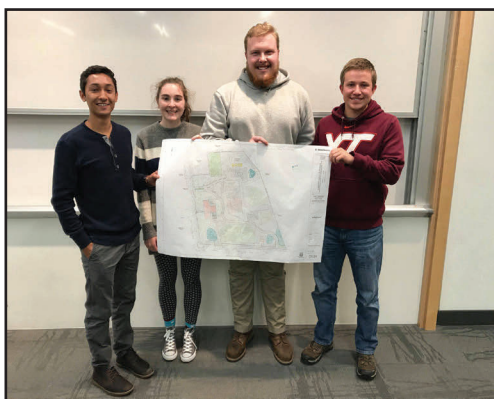
in the future.

SEI VT graduate student organization has successfully provided graduate students with educational development and service opportunities. In the past, the chapter has provided a platform for transition to a professional life. They will continue to take steps towards the SEI mission "To advance and serve the structural engineering profession".

# Student Organization Updates 2018

## Sustainable Land Development Club (SLDC)

With the aid of faculty advisors Kevin Young and Randy Dymond, and working closely with the LDDI advisory board, the Sustainable Land Development Club (SLDC) brings together students



with a common interest in sustainability as it relates to land development design. The organization stays active throughout the year with a variety of professional development and social activities.

In the fall, the club did

a Christmas food run. The donations were given to the Montgomery County Christmas Store.

They also had some fun at a cornhole tournament that they organized as a fundraiser for hurricane victims in Puerto Rico. They gave the funds raised to the nonprofit organization Save and Children.

The in the spring, they elected new officers, Dante Coronado and Barret Terrel.

They had the annual career

night mixer which is held the night before the CEE Career Fair. It allows students to have an opportunity to meet and connect with employers in a more casual setting before attending the Career Fair.

The Design Charette Competition is a popular

event for the club. It was hosted this year by Skip Nottee from Dewberry. Teams were given an hour to complete a design challenge and the winning team was a repeat

champion from last year's competition. They are pictured to the left and team members include Michael Jeska, Mandy Dejonghe, Franklin Heinzmann, and Kyle Vaughan.

SLDC took a field trip to northern Virginia, hosted by J2 Engineers, Bohler Engineering, and TriTek Engineering. Students visited construction sites at different stages of construction to learn about the land development process.

Other service projects they are currently working on are FloydFest 2018 where they



provide the entire site layout for parking and concert setup. They also are helping with the Baja Car Track. Mechanical engineering students from the Baja Car Team are busy preparing for their national competition and SLDC contributes by working on the design of a practice track. The track is located on a parcel of land owned by Virginia Tech and features whoops and jumps to replicate the competition obstacles. They have to take things like stormwater management, erosion, and sediment control into consideration as they are planning and constructing the track.

## Theme Park Engineering and Design (TPED)

This has been an eventful year for a growing Theme Park Engineering and Design Club (TPED). Over the summer and throughout the fall and spring semesters the club has seen members take part in internships and co-ops with companies such as Disney, Universal Studios, Great Coasters International, Cedar Point, and more!

Amusement industry outreach is a large part of TPED's mission since its inception, and this year has been no different. In addition to hosting dozens of guest speakers, this year TPED was well represented at the IAAPA Attractions Expo and SkyNEXT, two huge opportunities to

network with industry professionals. IAAPA is an organization committed to ensuring safe operations, professional growth, and success of the amusement parks and attractions industry.

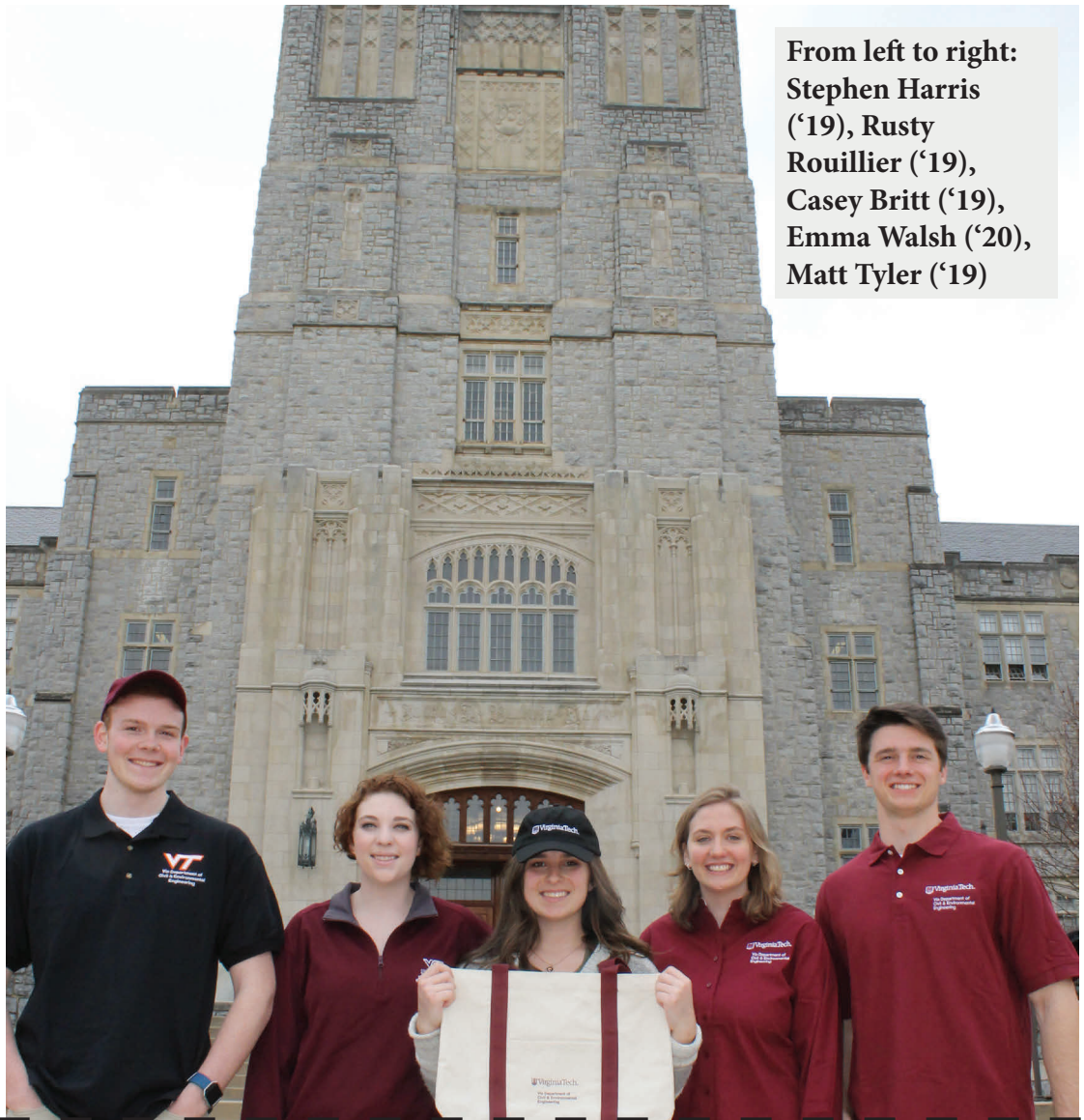
TPED also gives members the opportunity to learn more about the technical aspects of the amusement industry. This year, TPED went on guided, behind the scenes tours of Dollywood and Busch Gardens Williamsburg that offered a unique chance to see how roller coasters and theme parks operate up close and personal.



With the high levels of innovation and excitement that surround the amusement industry, TPED will have plenty of opportunities to continue hosting fun, informative, and exciting events for members. This year, TPED has seen even more members getting involved through internships and co-ops and we have no doubt that there will be a strong influx of Hokie graduates in the industry in the coming years.



# Show your Virginia Tech CEE pride!



From left to right:  
**Stephen Harris**  
 ('19), **Rusty**  
**Rouillier** ('19),  
**Casey Britt** ('19),  
**Emma Walsh** ('20),  
**Matt Tyler** ('19)

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