# CEE Alumni News




VirginiaTech
College of Engineering

2016

# 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 to make your pledge today.

# CEE

## ALUMNI NEWS

# Table of Contents


2 Note from Department Head

3 Alumni Board

4 Faculty Teaching Awards

6 Flint Water Study team

9 Hokie leads Team Clark group

10 Alumni Awards Program

11 CEE Career Fair

12 Alumnus works to improve safety and efficiency

13 Morgan and Myers inducted into NAC

14 Ten facts about the Dean

15 Two alumni earn ASCE honors

15 VDOT and VTTI speed up pavement testing

16 Senior Spotlights

18 Alumni Updates

19 Student Organization Updates



**Via Department of Civil and Environmental Engineering Annual Newsletter Summer 2016**

Department Head
**W. Samuel Easterling**

Alumni Board Chair, 2016 – 2017
**Young Ho Chang**

Editor & Alumni Relations
**Courtney Long**

Designer
**Courtney Long**

# Note from the Department Head

**W. Samuel Easterling**

It's that time of year again! I hope that your year is going well. This is a wonderful time to be in Blacksburg and to be a member of the faculty at Virginia Tech. The campus is buzzing at the end of the spring semester. I am looking forward to the pleasure of presenting diplomas to a new group of graduates of the Via Department of Civil and Environmental Engineering. The accomplishments of this class of students are outstanding and I look forward to following their success beyond graduation.

I always enjoy the opportunity to provide an update on everything that is going on in our department, from student activities and projects to a snapshot of some of the many wonderful things with which your fellow alumni are involved.

You may have seen news about the work that Marc Edwards, along with many Virginia Tech civil and environmental engineering students, has been working on in Flint, Michigan. We are proud of the work that the Flint Water Study team is actively pursuing to make a difference in that community.

Faculty and students in all of our program areas have been recognized this year for their outstanding research. This newsletter gives us the opportunity to share a few of those awards and honors that have been bestowed upon our faculty. The CEE faculty continues to provide high quality instruction to our students and lead cutting edge research of importance to the profession and society. Virginia Tech students, as well as members of the broader civil engineering profession, benefit from their talents and dedication on a daily basis. These talented individuals are a huge reason why the department continues to be ranked in the top 10 civil engineering programs by U.S. News and World Report. I hope you enjoy reading about some of their activities and successes.

Our alumni continue to do amazing things in their careers and one of the great pleasures I have in my job is being able to interact on a regular basis with some of our over 10,000 living alumni. These interactions range from working closely with members of our 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 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!

Our alumni are involved in a wide range of construction projects on the Blacksburg campus and surrounding area. Next time you are in town, I assure you there will be some changes, many of which are led by alumni of our department.

I encourage you to visit our website at 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.

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). I welcome the opportunity to catch up with those I know as well as meet those of you I don't know.

Sam Easterling

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

Tom Broderick
Arlington County

Jim Carter, Jr.
Retired
(Norfolk Southern Corp.)

Young Ho Chang
ATCS, P.L.C.
Chair

David Clarke
VDOT

Stephen DeLoach
Retired (U.S. Army Corps of Engineers)

Bernie Deneke
NAVFAC Atlantic

Brian Diefenderfer
VDOT

Betsy E. Dulin
Coates & Davenport, P.C.

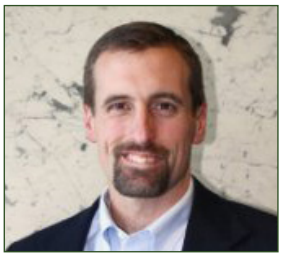
John R. Hillman
HC Bridge Company

Govi Kannan
Volvo Group N. America

Jeff Lighthiser
Draper Aden Associates

Herb Morgan
Fluor Enterprises

Laura Morillo
Hilti



Aaron Muck
Terracon Consultants

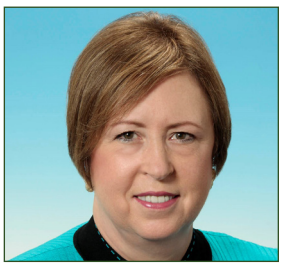
Skip Notte
Dewberry

Ann Piazza
L.A. Fuess Partners

Katherine Plasket
Bechtel Power
Vice Chair

Jon Porter
Turner-Fairbank Highway Research Center

Steve Seay
Rinker Design Associates



Beth Turner
Retired
(Dupont)

# Carin Roberts-Wollmann selected for the G.V. Loganathan Award

"Dr. Roberts-Wollmann is a fantastic teacher, presenter, and engineer. Her continued pursuit of excellence in her research, in addition to her important past experience as a structural design engineer, allows her to remain a strong communicator of design practices and intentions behind design codes," said Isaac Groshek, a first year graduate student in structural engineering. "She finds ways to present material in a clear and meaningful way to students that are craving to learn more."

The classes that Roberts-Wollmann teaches include Reinforced Concrete Structures I, Reinforced Concrete Structures II, Advanced Reinforced Concrete Design, Advanced Prestressed Concrete, and Structural Design for Seismic Load Effects.

She earned her B.S. in civil engineering from the University of Nebraska-Lincoln and continued on to receive an M.S. and Ph.D in civil engineering from University of Texas at Austin.

Prior to becoming a Professor at Virginia Tech, she worked as a Bridge Design Engineer at Parsons, Brinckerhoff, Quade, and Douglas. She also worked as a construction engineer for the Austin Bridge Company in Dallas and San Antonio. She is a licensed professional engineer in North Carolina.

That professional experience and hands-on mentality has made her a favorite among structural engineering students.

"I have yet to find an instructor who exceeds the professional and academic excellence of Dr. Roberts-Wollman," added Groshek.

In addition to teaching, she serves as the Program Coordinator for Structural Engineering and Materials. She also frequently participates in outreach programs such as CTech squared and Concrete for Kids, which are education programs to introduce K-12 students to engineering.

Her areas of research interest include reinforced and prestressed concrete structures, bridge design, and bridge construction.

Carin Roberts-Wollman helps two students during the Concrete for Kids program that is held on campus each summer.

This is not her first recognition for teaching. She has been awarded the College of Engineering Certificate of Teaching Excellence, the College of Engineering Faculty Fellow Award and the Precast/Prestressed Concrete Institute (PCI) Young Educator Achievement Award. She has also been honored as a Fellow in both the American Concrete Institute and the PCI for her outstanding contributions to the production and use of concrete materials, products, and structures in education.

The G.V. Loganathan Faculty Achievement Award was formerly known as the CEE Faculty Achievement Award. It is determined by a poll of current CEE students. It was renamed in memory of Dr. G.V. Loganathan who received the award five times during his tenure at Virginia Tech.

## Quick Facts about the **Via Department of Civil and Environmental Engineering**

545 undergraduate students

328 graduate students

# Mark Widdowson receives Alumni Teaching Excellence Award

Mark A. Widdowson, Professor of Environmental and Water Resources Engineering, as well as Assistant Department Head in the Via Department of Civil and Environmental Engineering is the 2016 recipient of the CEE Alumni Teaching Excellence Award. The CEE Alumni Board selects the recipient of this award based solely upon nominations received from CEE alumni who have graduated in the past five years.

Widdowson tests water supply samples in Punta Cana.

Widdowson earned his B.S. in civil engineering from the University of Cincinnati, his M.S. in water resources engineering from the University of Kansas and his Ph.D. in civil engineering from Auburn University. His research expertise includes mathematical modeling and experimental studies on the fate and transport of contaminants in soil, sediments and groundwater, including chlorinated solvents, chlorinated compounds, petroleum hydrocarbons, coal tar and creosote, inorganics, and metals.

He teaches courses such as Hazardous Waste Management, Fluid Mechanics, Groundwater Resources, Dynamics of Groundwater, and Numerical Modeling of Groundwater Flow and Transport.

"I took four classes with Dr. Widdowson including two classes in Punta Cana," said Nicole Ambramson ('13, '14). "He really cares about his students and is excited about the material he is teaching."

Widdowson has invested a lot of time and energy into the Punta Cana class, making it a successful and popular study abroad option for CEE students. This five week program explores environmental and water resources courses, as well as transportation courses centered in airport planning. The focus is to gain hands-on management and critical thinking skills while abroad.

Mark Widdowson receives the Alumni Teaching Excellence Award by CEE Alumni Board.

One main area of research that students have worked on while studying in the Dominican Republic is groundwater contamination. Much of the sewage is disposed of through pipes drilled directly into the ground, thus polluting the town's sole source of fresh water. Mark has led efforts to test the well water and provide solutions in order to help eliminate the concern around health issues related to sewage-contaminated groundwater.

He has been honored with a number of awards throughout his teaching career, including Outstanding Civil Engineering Faculty at Virginia Tech, Virginia Tech's College of Engineering Certificate of Teaching Excellence, and the Samuel Arnold Greeley Award by the ASCE Environmental and Water Resources Institute.

## Total Undergraduate Scholarships Awarded in 2015-2016

**~$200,000**

**9** U.S. News and World Report Undergraduate Ranking for Civil Engineering

**8** U.S. News and World Report Graduate Ranking for Civil Engineering

**7** U.S. News and World Report Graduate Ranking for Environmental Engineering

# "We know we can TRUST Virginia Tech."

By Courtney Long

Ut Prosim. That I may serve. It is a motto that all Hokies hold near to their heart. To graduate student, Rebekah Martin, Ut Prosim encompasses the purpose behind her education. "As engineers, we should not be working hard to serve ourselves, but rather to do all we can to make sure that we hold paramount the safety, health and welfare of the public."

"To me, it means to have humility, honor, courage, truth, and purpose in whatever you are doing to bring positive change to people's lives," said graduate student William Rhoads.

A group of civil and environmental engineering students, led by Marc Edwards, the Charles P. Lunsford Professor, have lived out this motto, making a difference in thousands of lives in Flint, Michigan.

In 2014, the water source in Flint was switched to the Flint River. As residents began to notice changes in the taste and appearance of their water, there was growing concern over the safety of it. Flint resident Lee-Anne Walters reached out to Edwards with concern about the orange-colored water flowing into her home. Edwards traveled to Flint as part of a study funded by the National Science Foundation to test the water and investigate the iron and lead corrosion in Flint city water. In August 2015, the team distributed 300 water sample kits and a surprising 277 were returned. Those samples indicated that there was an average of more than 133 times the amount of lead than the maximum that is allowed by the U.S. Environmental Protection Agency (EPA). In fact, one of the homes where samples were taken had 1,051 parts per billion. The maximum allowable limit set by the EPA is 15 parts per billion.

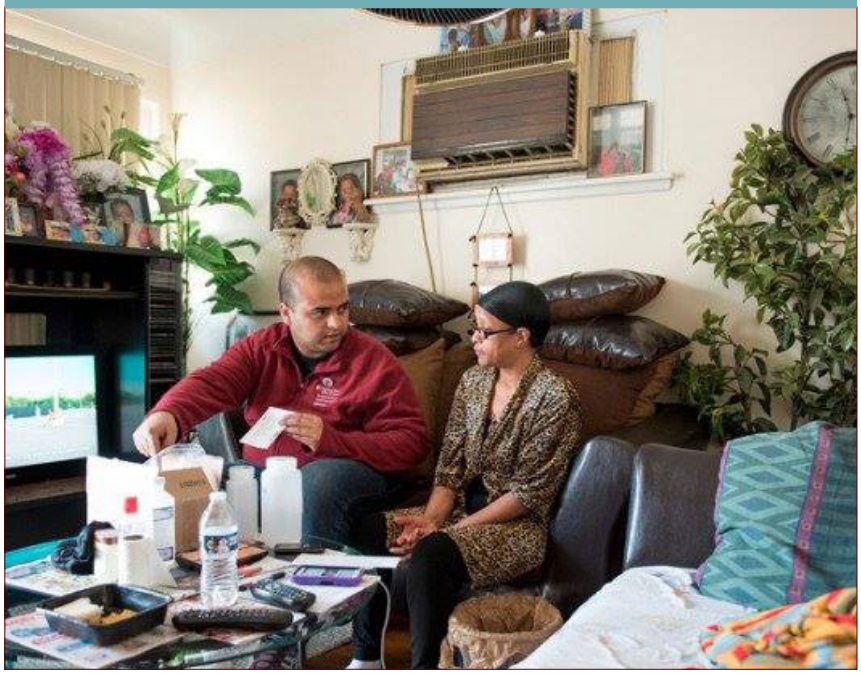
"Right now the population is afraid to drink tap water and many may never drink it again," said Martin.

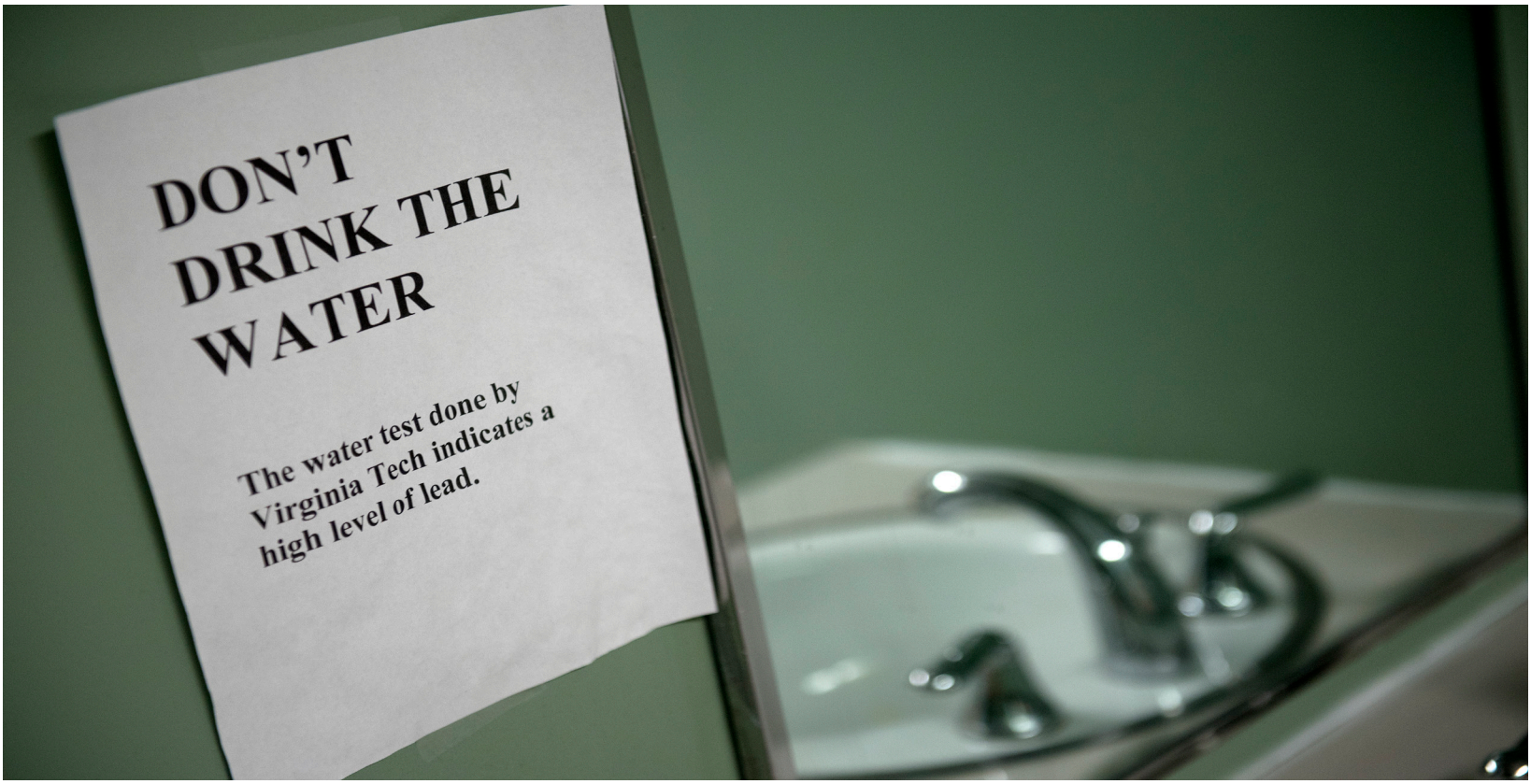
The goal of the Flint Water team is to not only improve the safety of the water in Flint, but also to inform and comfort the residents and help them gain trust in the safety of their tap water, something that much of the nation takes for granted.

"Healing the Flint community, which is traumatized and in pain may not be fully possible," said graduate student Siddhartha Roy. However, the team is determined to help with that in every way that they can.

They have made a number of trips to Flint, including the most recent one over spring break in early March. The goal of the trip was to see how lead levels in Flint have changed since corrosion control has been implemented and the city's water has been redirected to Detroit's water source. The team traveled to Flint with cars full of empty water bottles to collect samples. They also engaged in other service projects while in Flint, including distributing water kits to residents for testing, participating in a Habitat for Humanity building project, working with the Disability Network program, and visiting schools to discuss water safety.

Anurag Mantha helps to explain the water testing process to a Flint resident.






"Our work in Flint was different than what I expected. All of the work that we did had a direct and immediate impact on the people of Flint," noted graduate student Anurag Mantha.

The students, who have now formed friendships with the citizens of Flint, stayed with residents in their homes as a way to get to know their personal stories and go beyond just discussing the technical explanations of water quality.

"The biggest challenge in Flint going forward is trust," said sophomore Maggie Carolan. "People feel like they have been left behind in Flint - and while we are only there to test their drinking water, we want Flint residents to know that we care about them and their families."

"To help the citizens of Flint has been an invaluable experience," said Martin. "To be able to see an immediate impact of our work is incredible. The citizens of Flint are the true heroes and I feel honored just to have provided them with a little bit of support."

This effort by the Flint Water Study team to serve the citizens has not gone unnoticed. The story has flooded national and international news outlets but, more importantly, is appreciated by the residents of Flint.

Tonya Williams, said "we know we can trust Virginia Tech." The residents have continually shown their confidence in the Flint Water Study team, which is made up of 13 undergraduate, master's, doctoral students, and research scientists. These are the students that epitomize the meaning of Ut Prosim and are living it out each day.

"Ut Prosim is a character trait that is unsurprisingly common in many environmental engineers. Ut Prosim is a big reason why so many are attracted to the field - an earnest desire to do good and serve society through science and engineering," said Roy.

Sometimes the lessons learned outside of the classroom, through serving others, can be more valuable than the ones learned while sitting at a desk. Skills such as organization, planning, and teamwork are just a few of the ones noted by students that they have learned working in Flint.

"I've learned persistence. In the classroom, there is always a solution that needs to be achieved over a finite amount of time," said Rhoads. "Here, there is no one solution that makes everyone satisfied and happy. To reach an end that everyone can agree on, you have to be really motivated and persistent."

For graduate student Min Tang, the most valuable lesson she has learned through this experience is that "engineers and scientists need to be able to listen to the public and communicate with them. Citizens are a valuable asset to build up our knowledge so in order to do our work, the first and most important thing is that we talk to the public and listen to their issues carefully."

For one of the students, the work in Flint has been an invaluable experience for other reasons. Sara Chergaoui is an undergraduate exchange student from Morocco. She is obtaining a degree in engineering, but wasn't sure what discipline of engineering she wanted to pursue until she arrived in the United States. She is now studying civil engineering and had the opportunity to travel with the team to Flint over spring break. "I like the combination of service and learning," she said.

For others, it has made them more passionate about their studies at Virginia Tech and even helped to shape their future

**YOU CAN LEARN MORE ABOUT THE FLINT WATER STUDY TEAM AT:**

**http://www.flintwaterstudy.org** or on Twitter at **@flintwaterstudy**

careers in engineering.

"Before graduate school, I was certain I wanted to get into international development and work on critical water projects across the globe" said Roy. "The Flint experience has given me new appreciation for the academic freedom and the freedom of speech that universities bestow upon professors. And so, I may be thinking about academia now too."

Rhoads agreed by stating, "my career goals have changed and now I want to either do academic research or be on the front lines of a situation like Flint." The desire to make a difference in people's lives is evident in each one of the team members.

Martin noted that although the experience hasn't changed her career goals of becoming an engineering professor, "it has made me more passionate about speaking out regarding engineering ethics and never losing the compassion that we have for people. It has made me more passionate about teaching well and training up the next generation of engineers to be listeners of the public to work for the public good."

To each Hokie, Ut Prosim has a different definition. Carolan said that to her, "Ut Prosim is more than 'That I May Serve.' It is a commitment to lasting service and understanding. Service cannot simply be one act, such as distributing lead kits for testing. It is everything that comes after: communicating results, listening to individual stories, and maintaining friendships and relationships forged by our service. Partnerships are key to Ut Prosim, and the network of Flint residents, policymakers, public health workers, scientists, and engineers that have collectively exposed the Flint water crisis is strong."

The partnership between Virginia Tech and the residents of Flint, Michigan is far from over. There is still much work to be done, whether that means improving the infrastructure,

Maggie Carolan works on testing a water sample while visiting homes in Flint over spring break.

replacing pipes, balancing the health needs, or seeking financial resources to help fix the problem. Despite those challenges, the students that served in Flint learned the most from the personal relationships they formed and the lives in which they made a difference.

"My trip to Flint over spring break was truly transformative," said Carolan. "Sampling in individual homes was the most meaningful part of my trip. Water samples I am analyzing are now connected to families and their stories. Connecting emotion and memories to science adds a powerful dimension to my work that I never expected."

Siddhartha Roy and Dongjuan Dai prepare water testing kits to take to Flint over spring break.

# Hokie leads the west coast Team Clark group

Team Clark is a program for entry level engineers at Clark Construction. While their Bethesda, Maryland office has a successful Team Clark, the southern California offices have had a harder time due to the amount of area that the engineers and job sites are spread out across.

Nicole Abramson, who graduated with both a bachelor's and master's degree in CEE from Virginia Tech in 2012 and 2013 respectively, has hoped to change this in southern California. She recently helped re-establish Team Clark to allow newer Clark Construction employees a chance to see job sites in the region and meet leadership at those jobs. There is also a mentor component that teams a group of entry level engineers with a Project Manager or Senior Project Manager. Events are scheduled with mentor groups to gain insight and information on their careers at Clark.

Team Clark at San Diego State University's Engineering Building.

So far, the group has toured all of the active job sites in southern California. Among these are the Los Angeles Federal Courthouse Courtroom, Universal Studios Hollywood Fast & Furious, Los Angeles Valley College Athletic Training Facility, San Diego Marriott Renovation, East County Bus Maintainance Facility, Ventura County Medical Center, Petco Park, and San Diego State University Engineering Building.

"I've enjoyed them all, but my favorite was probably the Universal Studios tour," said Abramson. "We got to see the Fast and Furious before it was finished. It was neat to see the props and show pieces as they were being put in place."

These job site tours are particularly beneficial for Abramson, because she works in the preconstruction department of Clark in Irvine, California. She spends a significant amount of time assembling the bids and estimates for projects, but rarely gets to see them once they are under construction.

A bonus to Team Clark is that there are a number of Hokies, specifically CEE graduates, that also work in the area. For Abramson, she almost wasn't a Hokie and only came on a campus tour because her dad made her. He is an ocean engineer and works with Virginia Tech graduates frequently. Looking back, she is glad she listened to him because she loved her time at Virginia Tech and it helped prepare her for her job.


Team Clark at Petco Park in San Diego.

"I would say that most of what I do in my job now, I was taught when I started at Clark Construction," she said. "However, I definitely learned how to problem-solve at school. Once I had the background information, I was able utilize it in real world applications in my career."

Now that Team Clark has been in existence for over a year, the attendance and interest continues to thrive. The group, led by Abramson, strives to visit a job site every quarter all over southern California.

# Alumni Achievement Awards Program

**Academy of Distinguished Alumni Class of 2016**

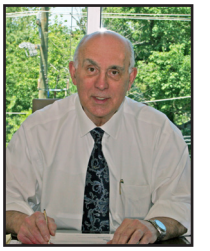
**Ms. Robin E. Bain**
B.S. 1980, M.S. 1987
**Mr. Bruce R. Bates**
B.S. 1979, M.S. 1981
**Mr. William Caruthers**
B.S. 1964
**Mr. Richard M. DiSalvo, Jr.**
B.S. 1977, M.S. 1979
**Mr. Robert C. Hubbell**
B.S. 1981
**Mr. James K. Lowe**
B.S. 1978
**Dr. Kord J. Wissmann**
B.S. 1987, Ph.D. 1995

**Outstanding Young Alumni**
**Mr. Timothy C. Bayse**
B.S. 2001, M.S. 2004
**Mr. Doran Bosso**
B.S. 2006, M.S. 2008
**Dr. Ying Xu**
Ph.D. 2009

**The Academy of Distinguished Alumni class of 2016**


Robin E. Bain


Bruce R. Bates


William Caruthers


Richard M. DiSalvo, Jr.


Robert C. Hubbell


James K. Lowe


Kord J. Wissmann

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 Long, Coordinator of Alumni and External Relations, for the nomination forms.

The form, resume, and cover letter can be completed via email to celong@vt.edu or mailed with supporting documents to:

Via Department of Civil and Environmental Engineering
Virginia Tech
200 Patton Hall
Blacksburg, VA 24061

Alumni may be selected for induction into the Academy of Distinguished Alumni based upon a review of overall career accomplishments, contributions to the profession and their community, and service to Virginia Tech. Younger alumni within 15 years of their B.S. degree may be selected for an Outstanding Young Alumni Award. After this year's induction, there are a total of 108 members in the CEE Academy and 50 Outstanding Young Alumni.

**2016 Outstanding Young Alumni**


Timothy C. Bayse


Doran Bosso


Ying Xu

# CEE Career Fair

## Fall 2016 Civil Engineering Career Fair

Tuesday, October 25, 2016
The Inn at Virginia Tech
10:00 a.m - 4:00 p.m.

Employer registration will be open on June 1, 2016 at http://www.cf.cee.vt.edu. Interviews will be held at the Inn at Virginia Tech on Wednesday, October 26. Firms interested in interviews must sign up during registration.

Contact Kara Lattimer at karalatt@vt.edu or 540-231-7148 for more information. If there are any job/internship postings you would like us to advertise in advance, please email position descriptions to vtceejobs@gmail.com.


From alumni career networking to CEE Career Network and career fairs, the CEE department provides opportunities for students to network with employers and secure connections for their future. This is a great opportunity as well for alumni to find candidates for their companies.

The department hosts a career fair each semester for employers looking for entry-level and internship/co-op candidates for positions dealing with civil engineering design including:

- Environmental
- Geotechnical
- Land Development
- Structural
- Transportation
- Water Resources

Employers are also offered an optional interview day following the Career Fair to allow for more time to interact and speak with potential employees.

In addition to career fairs, the CEE job board is updated daily to provide a list of employment opportunities that have been provided for current students directly to the CEE department. As alumni, you know first hand that the Hokie Network within Civil and Environmental Engineering is a strong one. The department works hard to continue to contribute to the career success of students and alumni.

# Alumnus works to improve safety and efficiency

Diverging diamond interchanges are quickly becoming a popular solution to improve traffic flow and safety at interchanges. Some professionals have called it the "way of the future," while others have called it "too weird." Soon, students, alumni, and visitors will have a chance to make their own judgement.

Set to be completed at the end of 2019, the $46.7 million project will replace the current at-grade intersection at Southgate Drive and Route 460. This project will consist of two new bridges over Route 460 and the relocation of portions of Huckleberry Trail, Research Center Drive, and Southgate Drive.

The ultimate plan is to realign the intersection to take it from an at-grade intersection with stoplights to a grade separated diverging diamond interchange with two bridges. Along with the new interchange at Route 460, two additional traffic circles will be constructed. One will connect the rerouted Research Center Drive to Southgate Drive, in what was formerly the dairy complex. The second traffic circle will connect the new interchange with the existing intersection at Southgate Drive and Duck Pond Drive.

Over the past fifteen years, the stoplights on Route 460 have been gradually eliminated. South Main Street and Tom's Creek Road intersections have both been removed due to the high volume of traffic. Once this current project is done, drivers will be able to go from Interstate 81 to Pearisburg without hitting a stoplight. The addition of this diverging diamond interchange will not only help with day-to-day traffic, but will improve efficiency for large events like Virginia Tech football games.

"In a typical interchange, there are a lot of points of conflicts, but a diverging diamond minimizes those points of conflict," said John Ralston, Project Manager for Branch Highways. "With a diverging diamond, it moves the stop signals and cars switch sides before getting to the ramps. It eliminates their paths crossing and reduces the points of conflict."

The Virginia Department of Transportation has provided a detailed explanation, along with a virtual driving simulation through the proposed interchange.

Ralston has been working on the project since January 2016, but has been with Branch Highways since 2014. He is a two-time Hokie alumnus, with a Bachelor of Science degree in animal science in 1999 and a Bachelor of Science degree in civil engineering in 2007. "Every day I am referencing something one of my CEE professors said. I am very fortunate to have had the professors I had," he noted, adding, "The interesting thing about a degree in civil engineering is that it is not a professional degree. I didn't come out of there knowing everything I needed to know to be a project manager, but I definitely had the fundamentals and the work ethic that were important to practice what I had learned and to improve my work through my experiences. That is what got me to where I am today." For Ralston, it is a dream come true to now have the chance to transform the university where he spent "the best years of my life."

John Ralston

The new Southgate Interchange is set to be completed at the end of 2019.

# Herbert W. Morgan and A. Ross Myers inducted into the National Academy of Construction

The National Academy of Construction held its annual meeting at Kiawah Island Golf Resort in late 2015. During the meeting, the Academy honored 26 new inductees into the National Academy of Construction. Among the honorees were two Charles E. Via, Jr. Department of Civil and Environmental Engineering alumni.

Herbert W. Morgan earned his B.S. in civil engineering in 1974 from Virginia Tech. He has a wealth of experience in engineering and construction engineering, specifically managing domestic and international heavy civil projects that include highway, road, and bridge construction for major expressways. His career began as a field engineer in Richmond, Va., before working with Fluor for more than 30 years as a construction engineering manager, construction manager, project manager, project director, and vice president of operations. As president of Zumbro River Constructors, LLC, a company used for design build delivery in the Midwest, he oversaw two successful award-winning design build projects for the Minnesota Department of Transportation. He also served as Fluor's sponsor on the $2.2 billion World Trade Center Transportation HUB project that constructed the Calatrava designed free-standing glass and steel structure that captures the heroism of September 11.

Herbert W. Morgan ('74) and A. Ross Myers ('72) were inducted into the National Academy of Construction in October 2015.

Morgan is a member of the American Society of Civil Engineers (ASCE) and has previously served on the advisory board for the Myers-Lawson School of Construction at Virginia Tech. He was inducted into the Virginia Tech CEE Academy of Distinguished Alumni in 2009 and currently serves on the department's alumni board. Morgan has been published in professional publications and has presented at numerous national conferences. In 2014, he received the Myers-Lawson School of Construction Award in recognition of his service to the industry.

A. Ross Myers was another alumnus that was inducted into into the Academy. He graduated with a B.S. in civil engineering in 1972. Following graduation, he returned to his hometown to work for Allan A. Myers, a small construction company established by his grandfather. He became President in 1983 and the company evolved into American Infrastructure, a contracting firm with 1,400 employees. The company was ranked among Engineering News Record's annual Top 400 U.S. Contractor's List, the Top 50 Heavy and Highway Contractors, and the Top 200 Environmental Engineering and Construction Companies. As CEO, Ross was responsible for the restoration or adaptive re-use of many old Pennsylvania buildings and structures.

Myers served on CEE's alumni board and the College of Engineering's Committee of 100. He was inducted into the CEE Academy of Distinguished Alumni in 2002. Along with John R. Lawson II, he made a significant contribution that helped establish the Myers-Lawson School of Construction at Virginia Tech. He is an active supporter of many regional and national charitable organizations.

The National Academy of Construction selects leaders in the industry that have made significant contributions to the construction industry and are actively working on issues of importance. The membership is currently made up of almost 200 professionals that have made contributions in the areas of technology, alternative contracting and project delivery procedures, work processes, safety, industry image, workforce development, labor relations, tools, communications, construction law, higher education, and cost and schedule management effectiveness.

# 10 Facts about the Dean

## Dean Richard Benson

Richard C. Benson, the Paul and Dorothea Torgersen Chair of Engineering and Dean of the College of Engineering at Virginia Tech, will be the next president of the University of Texas at Dallas.

1. Under Dean Benson's leadership, the College of Engineering has doubled the number of student applicants, growing enrollment to almost 8,000 undergraduates and 2,300 graduate students.

2. He encouraged faculty to adopt a "Hands-on, Minds-on" philosophy of learning.

3. Under his leadership, the College of Engineering climbed to its highest ever ranking in National Science Foundation's report on engineering schools' research expenditures.

4. He championed the creation of the Institute for Critical Technology and Applied Science (ICTAS) which is known for high-end interdisciplinary research in physical and engineering sciences.

5. Benson presided over the opening of Goodwin Hall, a $100 million building that includes seven classrooms, an auditorium, and more than 40 instructional and research laboratories.

6. Prior to Virginia Tech, he was the head of the Department of Mechanical Engineering at Pennsylvania State University.

7. He earned a B.S. in aerospace and mechanical science from Princeton University, an M.S. from University of Virginia, and a Ph.D. from the University of California, Berkeley.

8. Benson has been working closely with Don Taylor, the head of the Grado Department of Industrial and Systems Engineering at Virginia Tech, who will serve as the interim dean of the College of Engineering.

9. An international search to replace Dean Benson will begin in early fall 2016.

10. He will begin his term at The University of Texas at Dallas this summer. The university is located 20 miles north of Dallas and enrolls approximately 24,000 students.

# Two Alumni get American Society of Civil Engineers honors

David D. Dee, Jr. ('87) was elected as national president of American Society of Civil Engineers' (ASCE) Environmental Water Resources Institute (EWRI).

As a student, Dee was actively involved in the Virginia Tech ASCE chapter and was a member of the concrete canoe team. He continued on to earn his M.E. in Civil and Environmental Engineering in 1998 from the University of Maryland, College Park.

David D. Dee, Jr.

He was elected vice president in 2013, served as president-elect in 2014, and his one year term as EWRI president began on October 1, 2015. He will complete his rotation when he serves as past president beginning in October 2016.

Dee is a registered professional engineer in Maryland, Kentucky, and West Virginia. He is a diplomate of the American Academy of Water Resources Engineers and was one of EWRI's founding members. The organization now has over 22,000 members.

As president, he hopes to focus on the strategic issues of making EWRI a value-driven organization and increase its membership among young professionals.

Dee has designed and managed various types of transportation and infrastructure projects over the past 26 years with Parsons Brinckerhoff.

Rajan Jha ('13) was recognized as one of ASCE's New Faces of Civil Engineering. He was honored during Engineers' Week and at ASCE's annual Outstanding Projects and Leaders (OPAL) gala. The recognition seeks to highlight the next generation of civil engineering leaders.

After coming to the United States in 2011 to pursue a master's degree at Virginia Tech, he became very involved with ASCE.

"Coming to VT was one of the best decisions of my life and two years spent there has helped me achieve so much," said Jha.


Rajan Jha

He serves as the first vice president of the Virginia Section and heads the website, newsletter, and scholarship commiteee. He also started Water Allies, a volunteer intiative to work on the current water based challenges in developing nations.

Jha is a Water Resources Civil Engineer for ARCADIS, Region 4 in Richmond, Virginia.

# Virginia Department of Transportation and Virginia Tech Transportation Institute are speeding up pavement testing

Even with a mild winter in Virginia, potholes are still evident on roads throughout the commonwealth. Gerardo Flintsch, professor of transportation infrastructure and systems engineering at Virginia Tech, and alumnus, Brian Diefenderfer ('96, '98, '02), senior research scientist with the Virginia Department of Transportation (VDOT), are working to eliminate potholes.

Gerardo W. Flintsch

The goal was to unveil a tool that would help to reduce the wear and tear on cars, while also maintaining roads for more efficient costs.

In November, a 54-ton mobile structure was unveiled at the Virginia Tech Transportation Institute (VTTI) that will significantly speed up pavement testing.

The heavy vehicle simluator, owned by VDOT, will allow for data collection on the pavement.

According to Diefenderfer, it will speed up the time needed to test roads and learn the impact of traffic on those roads, which will also reduce the costs. The heavy vehicle simulator will run a wheel assemby to apply a weighted load to a test pavement to simluate the wear and tear of heavy traffic.

Brian K. Diefenderfer

# College of Engineering Outstanding Senior Casie Venable

The College of Engineering at Virginia Tech selected Casie C. Venable as the 2016 College of Engineering Outstanding Senior. Venable is a double major in Civil Engineering and Construction Engineering and Management. In 2015, she was a Marshall Scholarship Finalist, a prestigious honor given to only forty scholars per year, worldwide.

Despite her increased class load, she still earned a 3.99 GPA. "Casie is a gifted scholar," said Assistant Professor of Practice Vickie Mouras. "Her academic accomplishments are even more noteworthy when one realizes the breadth of her invovlement in extracurricular activities."

Venable is actively involved in the College of Engineering Dean's Team, College of Engineering CEED Mentor, Hillcrest Hall Council, Sigma Lambda Chi Construction Honor Society, Phi Kappa Phi Honor Society, Chi Epsilon Civil Engineering Honor Society, and Tau Beta Pi Engineering Honor Society. In addition, she is a student Teaching Assistant in University Honors and serves as a Department of Civil and Environmental Engineering ambassador.

Recently, she was asked to serve on one of the four thematic subcommittees for President Timothy Sands' Beyond Boundaries Initiative. As a member of the "Advancing as a Global Land-Grant" committee, she had the opportunity to help create a vision for the land-grant of the future.

One of Venable's goals in college was to create a well-rounded and comprehensive educational experience for herself. She has worked to venture from her academic comfort zone by working with professors in political science and humanities, in an effort to expand her knowledge in other areas and to apply it to her engineering career.

"I believe that engineers do best when they can approach a project more holistically," she said.

The announcement of her College of Engineering honor stated, "Casie has combined her construction technical knowledge and skills with her Ut Prosim core value, global engagement, and her heart for the less fortunate."

Her service-oriented mindset is evident in her involvement with Bridges to Prosperity, as well as other opportunities that have led her to participate in service abroad. She served as President for Bridges to Prosperity, where she was manager for a footbridge in Las Violetas, Guatemala. In that role, she managed design and construction teams, formulated design and schedule, estimated costs and materials, and oversaw the construction. In 2015, she was a Bridge Builder Conference Presenter for Bridges to Prosperity in Estes Park, Colorado.

Venable has also traveled independently through

Guatemala and Belize studying how NGOs promote sustainable community development and poverty alleviation. As a sophomore, she was selected for the Rising Sophomore Abroad Program that traveled to Germany, Switzerland, and Italy to understand the cultural, economic, and social factors that affect practicing engineering in a global society. She participated in the Presidential Global Scholars Program in Riva San Vitale, Switzerland, where she studied Italian, humanities, and sciences in a living-learning environment. The program was focused on Humanities and Sciences, but Casie said, "Engineering is so much more than math and science. It requires a global awareness and understanding of people and culture. This experience gave me an opportunity to develop this side of myself."

When she is not traveling the world, Venable has held two internships, with Thornton Tomasetti in Washington, DC and Barton Malow Company. She worked on a variety of projects, including the new construction of Pennsylvania State University South Halls.

Next year, she will continue her studies as a graduate student at University of Colorado Boulder with a GANNN fellowship in Engineering Resilience.

CEE Department Head Sam Easterling describes Venable's work ethic well. "She displays the motto of the university "Ut Prosim" with fervor. She is a gifted young woman who can inspire others, motivate groups and lead by example and intention." He concluded, "She is a true leader, in every facet of her life."

# Senior Spotlights

**Name:** Terrell Fisher
**Area of Interest:** Structural Engineering and Materials

"Virginia Tech was my least favorite school," said Terrell Fisher. "I actually wore a Virginia Tech shirt on Whacky Tacky day in high school."

Although he wasn't originally wanting to be a Hokie, Fisher realized that was the best option for an engineering program that he had at the time and hasn't regretted his decision one bit. In CEE, he has gotten involved in ASCE as Treasurer, but has also taken the initative to start a Theme Park Engineering Club. As Founder and President of the club, he arranges for speakers to come make presentations to the club, which is made up of 254 members. Those speakers have included the Head of Engineering for Busch Gardens and a Disney Imagineer.

The ultimate goal is for the club to build an actual roller coaster on a plot of land in Blacksburg. Fisher will be staying at Virginia Tech as a student in the Structural Engineering graduate program and hopes to continue his involvement in the club that he started.

Following graduation from graduate school, he aspires to begin a career in roller coaster design or forensic structural engineering.

**Name:** Gwen Elwood
**Area of Interest:** Land Development

Gwen Elwood had never thought about being an engineer until she was a junior in high school, when a teacher pulled her aside and suggested it to her. She knew she had a knack for science and math, and after some further research into the options within engineering, she was sold.

"Civil engineering is unique from other types of engineering because of the service aspect," she said. "For me, that made me want to find what I could do to give back to the community and make it a better place."

Service and outreach are clearly important to Elwood, who is actively involved in the Marching Virginians and the Student Engineers' Council. She enjoys being a member of the Marching Virginians for the service projects and the people that she shares the experience with.

Whether in college, or beyond, she hopes to continue to serve. She is very interested in humanitarian engineering. "My dream is to improve somebody's quality of life," she said. "In an ideal world, I think I could do that in a sustainable sort of way."

# Alumni Updates

## 1950s

**Roger L. Brockenbrough** – B.S. ’54, M.S. ‘56 – Inducted into the USA Triathlon Hall of Fame.

## 1960s

**Thomas D. Rust** – B.S. ’65 – Received the Virginia Tech College of Engineering’s Distinguished Alumnus Award.

## 1970s

**A. Ross Myers** – B.S. ’72 – Inducted into the National Academy of Construction.

**Herbert Morgan** – B.S. ’74 – Inducted into the National Academy of Construction.

## 1980s

**David D. Dee** – B.S. ’87 – Elected as national president of the American Society of Civil Engineers’ (ASCE) Environmental Water Resources Institute (EWRI).

**Kord J. Wissmann** – B.S. ‘87, Ph.D. ‘95 - Presented the 10th annual Schnabel Engineering Lecture at Virginia Tech.

## 1990s

**John R. Hillman** – M.S. ‘90 – Received the Virginia Tech Distinguished Alumnus Award.

**Kartik Chandran**– M.S. ‘97 – Recognized as a 2015 MacArthur Fellow.

**James Parkes** – B.S. ’98, M.S. ‘99 – Recognized with the National Rehabilitation Project of the Year Award from the Association of State Dam Safety Officials (ASDSO).

## 2000s

**Marshall R. Eichfeld** – B.S. ‘00 – Named the Virginia aviation lead for Michael Baker International’s Richmond office.

**Kevin D. Young**– B.S. ‘00, M.S. ‘06 – Received the College of Engineering Sporn Award.

**Timothy C. Bayse** – B.S. ‘01, M.S. ‘04 – Received the Engineer of the Year award for the Midland region of The Naval Facilities Engineering Command (NAVFAC).

**Tim Belcher** – B.S. ‘02 – Awarded the 2015 American Society of Highway Engineers’ Young Member of the Year Award.

**Kevin Heaslip** – B.S. ‘02, M.S. ‘03 – Named research leader for resilience for the Virginia Tech National Capital Region’s research development team.

**Bridget Moynihan** – B.S. ‘07 – Named one of the Mass Transit’s 2015 Top 40 Under 40.

**Ying Xu** – Ph.D. ‘09 – Awarded the Outstanding Doctoral Dissertation Award from the Air and Waste Management Association.

**Emily Sarver**– Ph.D. ‘10 – Received Society for Mining, Metallurgy, and Exploration Career Development Grants. Named the Burkhart Mining Society at Virginia tech’s 2015 Teacher of the Year.

**Rajan Jha** – M.S. ‘13 – Recognized as one of the 10 New Faces of Civil Engineering Professionals.

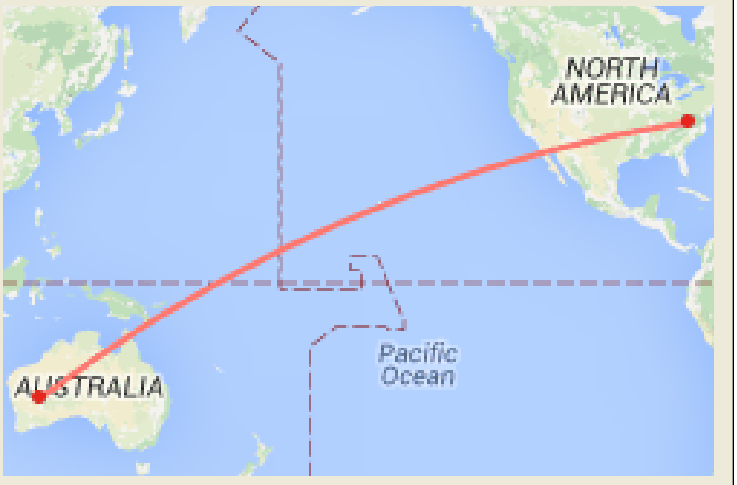
## About Via Department of Civil and Environmental Engineering Alumni

More than **9,500** alumni from all **50** states, the District of Columbia, and **59** countries.

Most alumni currently live in **Virginia**.

Our closest 221 alumni live in Blacksburg.

Our furthest three alumni live almost on the exact opposite side of the world (11,437 miles) from Blacksburg in western Australia.



# Student Organization Updates 2016

## American Society of Civil Engineers (ASCE)

ASCE has been busy this academic year. It all began in the fall at the CEED Show where freshman had the opportunity to come out and learn about ASCE.

In October, ASCE continued its tradition of participating in the annual Stream Clean Up of Stroubles Creek and the Duck Pond. They joined forces with AWWA And EWRI members for this event.

The group took on great heights by visiting the New River Gorge Bridge in November. Students were able to walk underneath the bridge and be 876 feet above the ground. They also went on flat ground to tour the new 460 Southgate entrance that is under construction and set to open in 2019.

The spring semester really heated up with weather and more field trips. Students visited the Smart Road at Virginia Tech to see how testing could be done and simulated for any weather pattern. Members slso took a tour of the Steam Plant to find out exactly how campus is heated.

The chapter has plans to team up with the Society of American Military Engineers (SAME) to learn about the construction of the new upper quad area on campus. They also plan to take a field trip to the Hokie Quarry to find out how campus gets its beautiful Hokie stone.

ASCE put volunteer hours to work by participating in the Virginia Science Festival and the Big Event.

The group hosted general body meetings every couple of weeks. These meetings featured a variety of guest speakers including:

- Dr. Sam Easterling, CEE Department Head
- Katherine Plasket, Bechtel Power
- Dr. Chris Kiwus, VT Facilities
- Dave Spriggs and Bob Bonk, Draper Aden Associates
- Courtney Beamon, Delta Airport Consultants
- Skip Notte, Dewberry
- Herb Morgan, Fluor
- Jim Hummel, Skanska
- John Hillman, HC Bridge Company
- Scott Dewhirst, Newport News Waterworks

The Concrete Canoe and Steel Bridge teams worked hard all year preparing for the ASCE All Virginias' Conference. Both teams invited major donors (Fluor and Skanska) in the spring semester to give tours and provide updates on the progress they were making.

The Concrete Canoe team stayed on top of things from the beginning and managed to get in multiple practice paddle sessions at Claytor Lake. All the hard work paid off for the team when they placed 2nd place overall at the ASCE Virginias Conference.

Steel Bridge was right with the Canoe team, working hard all year long. They got behind with deliveries of materials, but didn't let that stop them. They were able to get in a practice test before the conference and fix their bridge right before the competition. The team placed 4th overall at the conference.

The ASCE officers traveled to George Washington University in Washington, DC on April 1-2 to show their support and compete in a Transportation Engineering competition. The ASCE team of four members competed against eight other schools and brought home first place.


*Concrete Canoe team members at Conference*


*Steel Bridge team members at Conference*

*ASCE members of a tour of the Smart Road*

# Student Organization Updates 2016

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

The Virginia Tech chapter of AREMA is a student-run organization that is working to create a connection between students and professionals in the railroad industry. AREMA's mission is to develop and advance both technical and practical knowledge and recommend practice pertaining to the design, construction, and maintenance of railway infrastructure.

This year, the VT AREMA chapter had two guest speakers from ENSCO and TranSystems. Pictured to the left is Allene Rieger, P.E., who served as one of those speakers. There was also a field trip to Norfolk Southern's locomotive shop in Roanoke, Virginia. Several of the officers have had or will have an internship with Norfolk Southern and share their valuable experiences with the chapter to inspire other members to pursue a career in railroad.

## Alliance of Transportation Engineering Students (ATES)

The Alliance of Transportation Engineering Students (ATES) is the umbrella under which two student chapters, the Virginia Tech Institute of Transportation Engineers (ITE) and the American Road and Transportation Builders Association (ARTBA) perform. The underlying aim of having both transportation groups is to bring together students with diverse interests and ensure that all students interested in transportation are served in a comprehensive, interdisciplinary manner. ATES activities are able to strike an appropriate balance of those goals.

The group holds many social, academic, and other engagement activities throughout the year, including field trips, paper competitions and conference travel.

This year, the group attended the Traffic Bowl, which was hosted at the new Franks Cinebowl in First and Main in Blacksburg. The event is a jeopardy-style competition sponsored by the ITE. This year's team won the Virginia ITE traffic bowl. Noelle Wilcox, Ashley Sumner, and Alvaro Calle are pictured to the right with faculty advisor, Bryan Katz. They will be representing the Virginia Section of ITE at the Southern District meeting in Nashville, TN.

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

***Student members with Dr. Boardman at WaterJAM 2015***

The graduate student chapter of VA AWWA/VWEA had a remarkable year. Members participated in a stream clean-up event with EWRI/COPRI and ASCE to cover a vast area in and around campus.

Student design teams continued their winning streak at both conferences, organized by VWEA and AWWA. Members put in their hard work for the student design competition and represented the Virginia section at WEFTEC, the annual Technical Exhibition and Conference.

WaterJAM is an annual event jointly hosted by VAAWWA and VWEA, in the fall. The student team participated and won in both design and poster competitions. Two members were also selected to present their poster at ACE 2016 to be held in Chicago. The event provides the opportunity for technical growth of the members with various workshops, projects, and facility tours. Members had the chance to interact with professionals from the industry at the Young Professional (YP) meet-up.

The chapter also organized several Brown Bag talks. Presenters are students working on research projects in the water field. These talks give members practice for presenting in different settings and keep members informed about each other's challenges and progress.

Some new activities that the group has planned are meetings with guest speakers to talk about career oppotunities in the water industry. They are also planning to hold a seminar for undergraduates interested in attending graduate school to help them understand the application process and answer any questions.

# Student Organization Updates 2016

## Chi Epsilon

Virginia Tech's chapter of Chi Epsilon, a Civil Engineering Honor Society, had yet another eventful year. For the 2015-2016 academic year, the chapter has participated in a number of events. One of Chi Epsilon's focuses is to engage the youth of its local community and promote an interest in all facets of civil engineering. An outreach activity was held at Blacksburg's Gilbert Linkous Elementary School where college and elementary school students alike discussed the impact of civil engineering in their everyday lives, and then participated in the an interactive bridge building activity.

Chi Epsilon's focus on the local community is coupled with its dedication to help its collegiate community as well. Aside from creating an academically driven community within its members, Chi Epsilon also offers free tutoring services to all Civil Engineering students on a weekly basis.

Every Spring semester, the group organizes the CEE Research Day, where approximately 50 undergraduate or graduate students present their research in poster format to a panel of judges. This will coincide with the department alumni board meeting so alumni will have the opportunity to interact with students at the Research Day, with some alumni board members even serving as judges.

Every semester, new members are added to the chapter. This year,

***Chi Epsilon members participating in a bridge building activity with students at Gilbert Linkous Elementary School.***

Chi Epsilon will proudly add 29 students and two chapter honor members. Our chapter honor members include members of Virginia Tech's CEE Academy of Distinguished Alumni: Dr. George Filz – a distinguished professor, researcher, and Assistant Department Head at Virginia Tech's CEE department, and Mr. Timrod Groover. – President and COO of Wiley | Wilson.

## Construction Management Association of America (CMAA)

This academic year, the CMAA Virginia Tech student chapter and its members devoted considerable effort on planning and executing a variety of events toward student's professional development and advancing academia-industry connections.

CMAA held a Career Workshop in the Fall that covered general career advice, resume preparation, interview skills, job searches, and LinkedIn networking. The event had significant attendance from students seeking career tips and advice.

In October, CMAA continued their participation at the Rising CM Conference. Four students attended this event in Orlando, Florida, where they were able to establish relationships with other CM students around the nation.

In the spring, the chapter arranged for an industry speaker. The speaker was the CMAA National Capital Chapter Liason for Student Chapters. The speaker covered aspects of the development of the new I-66 Express Lanes and a $2.08 PPP Project. He also provided valuable insights on the relationship between young CM career paths, needed connectivity with academic resarch, future of the CM profession, and how theoretical foundations are translated into practice.

CMAA also held several Construction Manager-in-Training (CMIT) study exam sessions, where students had the opportunity to prepare for the exam and aquire the certification.

In April, an overnight visit is planned to the Boeing

***CMAA Members at the CMAA Construction Career Workshop***

facilities in Charleston, South Carolina with the prospect of engaging students in real industry experiences to cultivate interactions with industry experts.

Through these events and meetings, the CMAA Virginia Tech student chapter continues to value professional development for students and hopes to leverage its growth in the futrue to form deeper connections between students and the construction industry, creating value for students and the construction program as a whole.

# Student Organization Updates 2016

## Geotechnical Student Organization (GSO)

The Virginia Tech graduate students of GSO had a very productive and exciting year with involvement in technical conferences, talks from leaders in the industry, and the great generosity of department faculty members.

In February, the members of GSO traveled to Phoenix, Arizona to attend the 2016 Geotechnical and Structural Engineering Congress in order to foster ties between students and members of the geotechnical community. Through the help and support of the VT faculty, the GSO was also able to host a Geotechnical VT Alumni and Friends Reception at the conference, with over 70 attendees.

Throughout the past year, the GSO was able to facilitate lectures by top leaders in geotechnical engineering, including Dr. Jean-Louis Briaud of Texas A&M University and Kord Wissman, President of the Geo-Institute and alumni of this department.

In the near future, the GSO is also making plans for various outreach activities with students in West Virginia. The goal is to expose the younger generations to geotechnical engineering and promote growth within the field.

## EWRI/COPRI

Multiple outreach activities were carried out during the 2015-2016 academic year. During the fall semester, ASCE and AWWA/VWEA joined EWRI/COPRI for the annual stream cleaning activity on Stroubles Creek near campus.

***Members prior to an afternoon cleaning of Stroubles Creek on the Virginia Tech campus***

During the spring semester, the student chapter participated in a Kids Tech University (KTU), organized for students 9-12 years old and their parents, with hands-on demonstrations and discussion of wave mechanics recreated in an eight foot flume. The flume was designed and built by chapter members and this was the first year that the chapter participated in the event.

A coffee break meet-and-greet with Dr. Sandra Knight from the University of Maryland and a lunch meet-and-greet with Nancy Powell with Arcadis were hosted by the chapter. Both were in town as invited Environmental and Water Resources seminar speakers.

Another success of the chapter this year is that travel scholarships were awarded to members of the chapter that were presenting at conferences.

This year, the chapter officers wanted to focus on increasing the integration of EWR graduate students. For this reason, and to complement the chapter's outreach and volunteering opportunities, professors from different EWR fields were invited as speakers for the general body meetings. In total, there were four meetings during the academic year. Dr. Randy Dymond discussed the stormwater management and land development. Dr. Linsey Marr presented on Air Resources Engineering and Dr. Jennifer Irish shared her knowledge and expertise in Coastal Engineering.

The chapter co-hosted a seminar with the ASCE and AWWA/VWEA student chapters at the end of the semester to increase the interaction between undergraduate and graduate students. Scott Sewhirst from Newport News Waterworks was the invited speaker.

In early April, the chapter volunteered for "The Big Event" at Virginia Tech.

***EWRI/COPRI members demonstrate wave mechanics during Kids Tech University***

## North American Society for Trenchless Technology (NASTT)

NASTT is an engineering society of individuals, public organizations and private companies with strong beliefs in the practical, social, and environmental benefits of trenchless technology. Founded in 1990, NASTT represents 1,500 members throughout the United States and Canada who all promote better and more responsible ways to manage our underground infrastructure.

The Virginia Tech chapter, advised by Associate Professor Sunil Sinha, currently has about 30 members. They have been busy with travel in 2016. The annual No-Dig Show was hosted from March 20-24 in Dallas, Texas.

The group also took field trips to various sites in the area and participated in their annual stream clean up.

For more information about trenchless technology and NASTT at Virginia Tech, visit www.nastt.org.vt.edu.

# Student Organization Updates 2016

## Structural Engineering Institute (SEI)

The Structural Engineering Institute chapter at Virginia Tech is a graduate student organization that brings professional speakers and educational development opportunities to structural engineering students at Virginia Tech. Currently, the chapter has 80 members and keeps a busy calendar. They frequently work with American Society of Civil Engineers (ASCE), Earthquake Engineering Research Institute (EERI) and the Geotechnical Student Organization (GSO) to host events and service projects.

The SEI Graduate Student Chapter has been working closely with the newly formed SEI Professional Chapter in Roanoke, Virginia. They have been working toward increasing communication and collaboration with the professional chapter in order to offer construction site tours of projects in the community.

The chapter works hard to be able to send students to technical conferences around the country. This year, the chapter, in collaboration with the department and Student Budget Board, sent three students to present their work in Pheonix, Arizona at the joint Geotechnical and Structural Engineering Congress in February.

A trip is planned to send students to the upcoming NASCC Steel Conference in Orlando, Florida.

Continuing on the trend in recent years, the chapter hosted an eight lecture series known as the AISC Night School webinar series on steel design. GSO and EERI chapters also were involved in conducting the webinar series.

Lastly, the chapter is organizing the SEM graduate student involvement in this year's Relay for Life at Virginia Tech.

## Sustainable Land Development Club (SLDC)

With the aid of faculty advisor Kevin Young, and working closely with the Land Development Design Initiative (LDDI), the Sustainable Land Development Club (SLDC) brings together students with a common interest in sustainability as it relates to land development design. Graduating senior Meghan Hekl served as the club's president this year, and was joined by Estela Beatriz Cruz Velasquez and Dylan Hale who served as the club's Service Project Coordinators.

The 2015-2016 academic year was a busy one for the SLDC. During the fall and spring semesters, LDDI and the SLDC continued their tradition of hosting a "Land Development Career Night" on the eve of the Civil and Environmental Engineering career fair. During the fall semester, the SLDC also hosted a football viewing party for its members.

***A group of students toured development projects in northern Virginia.***

In March, Kevin Young led a group of SLDC students on a field trip to northern Virginia where they toured various complex, urban development projects. The site visits were arranged by Tri-Tek Engineering and Bowman Consulting.

In April, for the fourth consecutive year, SLDC members will provide stakeout surveying of the track for Virginia Tech's annual Relay for Life event - the largest collegiate Relay even in the entire world!

SLDC members will close out the month of April by competing in an LDDI-sponsored Design Charrette and Competition.

The past year also found the SLDC continuing its partnership with the FloydFest music festival. From relatively modest beginnings in 2002, the festival has grown considerably over the past decade. With its rapid growth, festival organizers have encountered numerous challenges, including site layout, shuttling of patrons into and out of the festival grounds, and public safety issues. In past years, SLDC members developed a series of site maps to help festival organizers to address these issues. During the 2015-2016 academic year, the SLDC continued working with FloydFest organizers on the FloydFest site as well as other festivals including the Vintage Virginia Wine Festival and the Elmwood Park Roanoke concert series.

***The site tours were hosted by Tri-Tek Engineering and Bowman Consulting.***

# 18th Annual Alumni Golf Outing

**When:** Thursday, June 2, 2016

**Where:** Bull Run Golf Club
3520 James Madison Hwy
Haymarket, Virginia

**Format:** Two-person Captain's Choice (scramble)

**Tee Time:** Shotgun start at 12:00pm

**Cost:** $90 per golfer (covers green fees, cart, and cookout after golf)

Complete the attached registration form and mail it, along with your payment (checks made out to Virginia Tech Foundation), by **Friday, May 30** to:

Courtney Long
Virginia Tech Civil & Environmental Engineering
200 Patton Hall, MC 0105
Blacksburg, VA 24061

## Registration Form

Golfer Name _____ Partner _____

Address _____ Zip _____ Class of _____

Daytime phone number _____Email _____

Interested in $100 Hole Sponsorship? _____ YES _____ NO

If YES, Company or Individual Name _____

# Show your Virginia Tech CEE pride!


**From left to right: Scott Goodman ('16) and Joseph Van Note ('17)**

Complete the form below or call (540) 231-6635 to place your order. Checks should be made payable to "Virginia Tech Foundation, Inc." and mailed along with this form to:

**Via Department of Civil and Environmental Engineering**
**Virginia Tech**
**200 Patton Hall, Blacksburg Virginia 24061**

Name: _____
Street Address: _____
City: _____ State:_____ Zip: _____

| Item (circle) | Quantity | Size (S, M, L, XL, XXL) | Color (Maroon or Black) |
|---|---|---|---|
| Baseball Hat ($11.50 each)<br>Polo Shirt ($28 each)<br>Sweatshirt ($25 each) | Hats: _____<br>Polo shirts: _____<br>Sweatshirt: _____ | Hats: N/A<br>Polo shirts: _____<br>Sweatshirts: _____ | Hats: _____<br>Polo shirts: _____<br>Sweatshirt: N/A |