

CE CONNECTION

Your Link to the Department of Civil Engineering

FALL 2016 | ISSUE 21



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SUPPORT THE DEPARTMENT

Looking for a way to support the Civil Engineering Department?

We have four different funds that enhance our ability to educate students:

- ➔ The Ken Kerri Endowment Fund – Gifts to this fund support faculty and student enrichment activities.
- ➔ The CE Freshman Scholarship Fund – Scholarships are given to outstanding freshmen.
- ➔ The Graduate Environmental/Water Resources Scholarship Fund – Scholarships go to deserving graduate students in the environmental or water resources engineering areas.
- ➔ The Department Trust Fund – These resources support student attendance and participation at conferences and competitions, senior design project team expenses, and equipment for labs when other funds are not available.

To donate to any of these funds, go to www.ecs.csus.edu/ce/support.html and follow the directions for online donations. Or mail a check made out to the appropriate fund to the Department of Civil Engineering, Attn: Ashley Mihok, California State University, 6000 J Street, Sacramento, CA 95819-6029.



UPCOMING EVENTS

Gain access to all of these events through the Department of Civil Engineering Sponsorship Program! Information for 2017 sponsorship will be distributed during the upcoming fall semester.

November 3, 2016:

13th Annual An Evening with Industry

December 9, 2016:

CE 190 Student Project Presentations

December 16, 2016:

Commencement

April 12, 2017:

Ninth Annual Ken Kerri Endowment Fund Luncheon

April 20–22, 2017:

Mid-Pac Competitions at California State University, Chico

September 2017 :**

Sixth Annual Civil Engineering Golf Tournament

*** The Department of Civil Engineering golf tournament is moving seasons from spring to fall! The next tournament will be hosted in mid-September, 2017.*

On the Cover..

Front: Civil Engineering faculty members enjoyed a planning retreat during the summer.

Back: iSEE Summer Workshop. (Photo courtesy of: Sacramento State/Jayla Lee)

CHAIR'S MESSAGE



Dear Colleagues, Alumni and Friends,

I'm happy to present the fall 2016 edition of CE Connection – our department newsletter to engage alumni, and enhance our visibility and connection with the civil engineering community.

This is my fifth message for the newsletter and I would be remiss if I let another opportunity pass by without thanking those who work so hard to produce CE Connection. Gina Maucieri of Say It Write Communications is responsible for writing all of the content while Rich Parkhurst and Rosendo

Tolento at the Office of Water Programs are the graphic designers of each issue. Ashley Mihok, the civil engineering administrative support coordinator, provides the necessary logistical support to connect Gina with students and faculty. As a team, their dedication, creativity and professionalism has been a pleasure to work with on each issue. Thank you Rich, Gina, Rosendo, and Ashley!

The fall semester started on a high note when we received a full six-year accreditation from ABET. This was the best possible outcome for our program and it speaks to the careful attention we give to maintaining rigor and relevance to the professional engineering community. Specifically, ABET lauded our supportive and active industry advisory committee, a point of emphasis that is a hallmark of our department.

Another point of pride for our program occurred during the annual awards ceremony for the American Society of Civil Engineers (ASCE), Sacramento Section, which covers 24 counties in Northern California. Of the 23 awardees, eight were associated with Sacramento State as either alumni (six), faculty (one) or students (one). This includes Margarita Kovalchuk (Outstanding Student) and Dr. Cyrus Aryani (Jonathan Brown Education Award). Sacramento State is also well represented among the ASCE leadership, including one faculty and two alumni as officers. I'm referencing this as a testament to the influence our program and university have on the local engineering community. We are very proud of our continued success in producing graduates who assume significant professional leadership roles.

Thank you for taking the time to read through the fall newsletter and for the fantastic support you give to our department.

Ben Fell – Chair, Department of Civil Engineering



Evening with AN INDUSTRY
Department of Civil Engineering

13th Annual

Developing the Capital SouthEast Connector Expressway

Derek Minnema | Keynote Speaker
Project Manager, Capital SouthEast Connector Project

November 3rd
5 pm – 8 pm | Alumni Center
Free to Students

Featuring a panel discussion with practicing engineers and a social hour for students to interact with industry representatives.

RSVP in RVR 4024 or by contacting Ashley at ashley.mihok@csus.edu

SACRAMENTO STATE

PREVIEW: An Evening With Industry Will Highlight Capital Southeast Connector Project

The annual networking and recruiting event sponsored by the Civil Engineering Department, An Evening With Industry, connects students with industry representatives to build relationships and give students a glimpse of the professional life beyond graduation. The event also brings keynote speakers who are deeply involved in some of the Sacramento region's major infrastructure projects. This year will be no different.

Derek Minnema (BS, '02) is the project manager for the Capital Southeast Connector Project, which will link Highway 50 to Interstate 5 in an effort to ease congestion through the heart of Sacramento and provide an alternate route to travel between Elk Grove and Rancho Cordova, Folsom and El Dorado Hills.

The project is anticipated to bring thousands of construction jobs as well as millions in indirect tax revenue. It will include a trail for pedestrians, bicyclists and equestrians that runs the entire 34-mile corridor, and the project is keeping sustainability and environmental preservation at the forefront.

An Evening With Industry also features a panel discussion during which engineering professionals answer questions from the students in attendance, as well as a networking portion where students can chat with a variety of public and private engineering firms.



Derek Minnema | Keynote Speaker
Project Manager, Capital SouthEast Connector Project

An Evening With Industry

For information contact: Ashley.mihok@csus.edu

Revamped Transportation Lab Offers Latest Software, More Possibilities

The start of the fall semester brought the unveiling of the department’s new transportation lab – a state-of-the-art learning space that’s eight years in the making.

Originally conceived in 2008 when now-Associate Dean Dr. Kevan Shafizadeh was working on a research project with Sacramento County, the idea of a transportation lab began percolating, and the following year, he secured grant funding from the American Public Works Association. “We converted one of the three geotech lab rooms into a traffic lab,” said Dr. Shafizadeh. “We put in six computers and added some tables.”

He knew he wanted to do more, so when Dr. Ghazan Khan was hired to join the faculty in 2013, they collaborated on how best to enhance the transportation lab. “We wanted to provide our students with the best opportunity to learn about transportation engineering using state-of-the-art resources,” said Dr. Khan. “Kevan and I started working on plans to upgrade the lab by procuring additional new computers and the latest software tools for use in transportation studies.”

It took some time to finalize and put in place the plans with additional funding provided by the Civil Engineering Department and through private donations. “We had lots of discussions with campus facilities management and Information Resources & Technology,” said Dr. Khan, who worked closely with Dr. Shafizadeh and Department Chair Dr. Ben Fell. “All three of us worked hard to make this happen.”

Now outfitted with 20 new computers, PTV Vision Traffic Suite software, carpeting, whiteboards, a high-definition projector, more tables, chairs and complete rewiring, the lab offers state-of-the-art facilities for both teaching and research supporting undergraduate and graduate students.

“This upgrade will provide students with the latest software in the transportation field, such as Civil 3D and PTV Vissim,

to get hands-on training,” said Dr. Khan. “That’s what we at Sacramento State pride ourselves on: that we provide students with the necessary skills to have them job-ready when they graduate from our program.”

“This lab can serve as the basis for launching innovative research into some of the critical problems that our transportation system faces,” Dr. Khan said. “One of the major purposes of upgrading the lab was to be able to leverage the expertise of our faculty and skills from our students to help the city, county, and other public agencies tackle critical transportation problems and find innovative solutions.”



Summer Program Helps Teachers Incorporate STEM for Middle & High School Students

Civil engineering professors played key roles in an eight-day summer workshop designed to help 75 local middle and high school teachers integrate engineering into their existing science curriculum.

Held on campus in July with the participation of Sacramento State and UC Davis professors as well as some high school instructors, the Integrating Science with Engineering Education (ISEE) program is federally funded and administered by the California Department of Education, and is a partnership between Elk Grove and Folsom-Cordova School Districts and the Sacramento Area Science Project (which includes Sacramento State and UC Davis).

Rustin Vogt, from the Mechanical Engineering Department (physical science).

“The life science part, which came at the end of the week, was on investigating what Chinook salmon need for spawning, then looking at how to modify the American River to provide those conditions at a specific location at Sacramento State,” said Dr. Poindexter. “They were learning about an engineering concept of the relationship between depth and velocity. Salmon need specific depth and velocity. We identified that the channel near Sac State wasn’t in the ideal range for spawning salmon.”

The group of teachers completed daily assessments and a longer evaluation at the end of the program; Dr Fell reports that the feedback was very positive. ISEE is a three-year program that helps teachers satisfy the state-mandated Next Generation Science Standards. “I think our efforts

“We definitely made a huge impact on how the teachers are going to incorporate new science standards into their classroom, which includes engineering. I’m very happy with it.” — Dr. Fell

“We went through lessons with teachers as if they were students to show how engineering could be tied to what they’re already teaching,” said Dr. Cristina Poindexter, assistant professor of civil engineering. “It can be built into their curriculum and also introduce [students] to what engineering is, and using science and math to work on a specific problem and design a solution.”

“There were about 15 people who taught sessions, ranging from grad students to some science instructors from local community colleges,” said Dr. Fell. “There was even a Davis High School physics instructor who taught two sessions and was amazing to watch, and faculty from Sacramento State and UC Davis. It was a big team.”

The teachers had the option to attend breakout sessions in one of three different sciences. Sessions were taught by Dr. Poindexter (life science), Dr. Fell (earth science) and Assistant Professor

were very well accepted,” said Dr. Fell. “We definitely made a huge impact on how the teachers are going to incorporate new science standards into their classroom, which includes engineering. I’m very happy with it.”



(Photo courtesy of: Sacramento State/Jayla Lee)

Grad Student Mixer Kicks Off Fall Semester



On September 13, the Epicure restaurant in the University Union was the setting for a reception welcoming new and returning graduate students in the Civil Engineering Department.

The Grad Student Mixer is an annual event created by the department to provide networking and resources specifically for graduate students, as well as for faculty, alumni and industry professionals.

After Department Chair Dr. Ben Fell greeted the group, students heard words of encouragement from some of the engineering professionals in attendance

“...what I’m interested in is presented in a practical way.” —*R. Greenberg*

(many of whom serve on the department’s Civil Engineering Program Industry Advisory Committee or its Environmental and Water Resources Engineering Graduate Advisory Committee).

Robert Greenberg, who earned his bachelor of science from Cal Poly Pomona, said he was already enjoying his experience as a grad student at Sacramento State. “You can get an environmental master’s degree elsewhere, but Sac State has a water resources focus,” he said. “Water is the number one resource in California. The big draw for me is that what I’m interested in is presented in a practical way.”

“You’re expected to be more proactive, making sure you’re where you should be.” —*K. Van Rooyan*

Kirk Van Rooyan has an environmental engineering focus, and is an alumnus of the department’s undergraduate program. He spoke of the difference between that and the graduate civil engineering program: “You’re expected to be more proactive, making sure you’re where you should be,” said Kirk, who works as a graduate student assistant in the Office of Water Programs. “Instead of assignments, it’s more of a discussion of ‘How do you think things are done in the real world.’”



OWP Welcomes First Graduate Research Fellow



This fall, Miguel Martinez will join the Office of Water Programs (OWP) as its first Graduate Research Fellow. The Graduate Research Fellowship Program (GRFP) provides an opportunity for one or two students to fulfill their master's project/thesis requirement by completing a research-based project in collaboration with OWP.

All projects will be consistent with OWP's mission of providing cost-effective solutions for protecting and enhancing water resources, public health, and the environment through training, scientific research and public education. Fellows will work alongside faculty and research staff, and upon successful completion of the project, will be reimbursed for part-time tuition plus a one-time continuation fee (if needed).

Miguel was selected after completing a competitive process that included a written application and in-person interview with OWP staff. Miguel earned his bachelor of science degree in civil engineering from Sacramento State in 2012 and is pursuing a master's degree in water resources engineering. After his expected graduation in December 2016, Miguel plans to work in the water resources engineering field and pursue his interest in efficient storage and use of stormwater runoff while minimizing the waste of water.

Miguel's research project is entitled, "Quantifying the Accuracy of Different Composite Sampling Schemes in Stormwater Monitoring." Advised and mentored by OWP Director Dr. Ramzi Mahmood and Research Engineer and Hydrologist Christian Carleton, Miguel will investigate alternative stormwater sampling methods to comply with regulatory requirements for pollutant monitoring.

As discussed in the project's problem statement, current sampling techniques for pollutant monitoring require expensive flow-measuring equipment and specific site requirements to accommodate that equipment, which often

limit the number of locations where monitoring can occur. Miguel's project will evaluate whether alternative sampling methods are accurate enough for typical regulatory purposes. The research will contribute to developing effective sampling schemes for ongoing efforts to reduce water pollution from stormwater runoff.

“ We are excited to work with Miguel...” —*Dr. Mahmood*

“We are excited to work with Miguel on a project that has the potential to make it easier to cost-effectively collect representative samples to characterize stormwater runoff, and ultimately reduce the impact on our water resources,” said Dr. Mahmood. “And, we're excited to see what future research fellows contribute to water resources knowledge and practice.”

Any interested graduate students, regardless of major or department, can apply for the spring 2017 fellowship. The application deadline is November 7, 2016. More information is available from the University Connection section of OWP's website at:

<http://www.owp.csus.edu/university-connection/>



NEWS & NOTES

Faculty



At a Glance Faculty Profile: Kim Scott-Hallet, PE, SE

The latest addition to the Civil Engineering faculty is an alumna of the department, having earned her bachelor of science degree at Sacramento State and her master of science in civil and structural engineering from the University of Washington. Kim Scott-Hallet has been a part-time lecturer for the department over the past eight years and has now joined the team full time teaching Graphics for Engineers (CE 4) and Statics (ENG 30).

She has worked for design engineering firms doing forensic engineering since 1999. "We're hired by insurance companies or lawyers to investigate buildings that have problems," says Ms. Scott-Hallet. "We determine the cause of the problem and provide repairs. I do expert testimony and give expert opinions in the field."

Having worked "all up and down the west coast," Ms. Scott-Hallet's career has focused on design retrofit of buildings, including steel, concrete and wood construction. "I want to share my real-world experiences with students," she says. "They take these classes and there's a lot of theory behind them, but what does it mean in the real world?"

While many of the students she's taught at Sacramento State have been upper division, this semester Ms. Scott-Hallet is primarily teaching freshmen and sophomores – and for the first time, a lab (for the CE 4 class).

"Seeing my students go through their courses and get a job and be successful at what they're doing – that makes me feel good," she says. "It means I had an impact on their life and made it better than it would've been otherwise."



Dr. Cyrus Aryani was awarded the Jonathan Brown Education Award by the American Society of Civil Engineers (ASCE), Sacramento Section, which covers 24 counties in northern California. At the same ceremony, which took place Sept. 28, Civil Engineering student Margarita Kovalchuk was

named Outstanding Student.

Alumni



2015... Jamie Johnson is working for the company where she interned while earning her degree: Electro Scan Inc., a leak detection technology for water and sewer pipes. She serves as director of Data Services, where she's responsible for reviewing data and providing

reports and deliverables to clients, as well as some project management duties. This year alone, she has conducted field demos throughout northern California and in Oregon and Colorado, and she's exhibited at multiple conferences nationwide. Jamie also became trained and certified through the National Association of Sewer Service

Companies (NASSCO) for the Pipeline, Manhole and Lateral Assessment and Certification Programs. She is a member of the California Water Environment Association. Jamie says, "It's been a very busy, but very good, year so far! It's been a great learning experience and I'm really enjoying it."



2015... Gina Zambarnardi works as a project engineer for McCarthy Building Companies in San Francisco as part of the Self Perform Concrete Division. "My project is the VTA Berryessa Extension Parking Structure," says Gina. "Everything has been amazing! There's lots of interaction with the design team as well as with the field, which I think provides a good foundation for my future career. I am very thankful for having such great CE professors at Sac State. I truly appreciate everything they did for us."



2015... Since graduation, Hannah Ducker, EIT, works under her father's firm, Eddington Engineering, Inc., which specializes in structural engineering for elevators. She plans to earn her PE and SE licensure so she and her older brother can take over the business upon her father's retirement. Says Hannah: "Working for my dad has made it very easy for me to work as an engineer, and spend time with my daughter, Lucy. Dad gives me drafting and structural calculation jobs and also takes me on occasional elevator inspections. The inspections are the fun part of the job for me. I am hoping to expand the business into other states besides California once I gain my licensure."

Student Profile



Vinh Le Kha

Vinh Le Kha is nearing graduation this fall – a remarkable feat considering the obstacles she's overcome. She's grateful to all those who helped her along the way and is already thinking about paying it forward.

How did you decide to major in civil engineering?

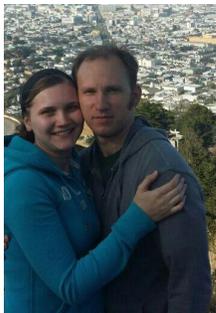
I was a neurobiology major at UC Davis and was trying to go pre-med. I was a 4.0 student, but after my second child was born in 2011, I couldn't keep up with all the financial constraints. I had sponsored my parents and my sister to come over from Vietnam. So I found a job at Caltrans as a secretary; it was just a job to bring in money and medical benefits for my family. But my supervisor, Lam Nguyen, talked to me and said, 'Why don't you change your major to civil engineering? The pay is decent and there are many disciplines. I am sure you will find a suitable field.' I said 'OK, I'll try to take some classes but I have to work full time. I don't know how I can go to school.' He said, 'I'll be flexible with your schedule so you can go to school.' I found classes at a community college that fit my schedule. I took lower division classes again because civil engineering requires different classes than pre-med. Lam opened the door to the civil engineering world for me, so I thank him.

Attending school, working full time, and a husband and two kids – you must be extremely busy.

Yes, my kids are 4 and 6. When I started working on my degree they were very young. In 2012 my husband lost about 40 percent of his income. My salary as a secretary was a little over \$1,000 a month working full time. We

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NEWS & NOTES



2015... Yaroslav Zakusilo works as a scientific aide with the Department of Pesticide Regulation, and on the weekends as a non-emergency ambulance driver. He hopes to work for an engineering firm in the near future. Yaroslav and his wife, Kristina, have three children: Ella, Liliya and William.

2015... Eduardo Villalpando is working with a truss manufacturer company called Entrussed, LLC as project manager/truss designer. He enjoys the flexibility afforded to him so that he can attend graduate school at Sacramento State. "I am really looking forward to what this semester has to offer. I am very thankful for all the help and support each and every professor ever offered me; I believe I couldn't have done it without it."

2015... Daniel K. Saechao continues to work as a full-time engineer at Dokken Engineering, where he interned while attending Sacramento State. He has worked on the design of curb ramps, driveways and drainage, among other things. "I've worked on a project in Santa Clarita for a pedestrian overcrossing spanning Sierra Highway," says Daniel. "I've also assisted in design for bridge widening and replacement projects in neighboring counties. A project I'm currently investing a lot of time in is the 5th Street bridge replacement project that connects Yuba City and Marysville. It's a big project but I'm learning and being mentored by numerous associate engineers. I experienced so much growth and learning at Sac State. Without it, I wouldn't have come as far as I have. It's mind-boggling to know I'll be able to take my PE exam in a little over a year!"



2015... The month she graduated, Ketty Avila began working for Stacy and Witbeck, Inc., a general heavy civil engineer contractor. For seven months she worked in the Alameda office as an engineer estimator, where she learned from seasoned professionals.

Ketty worked on estimates for various projects located from Washington to Arizona, including the Trans Bay Tube retrofit job. Recently, she relocated to San Diego to serve as a cost engineer on the north segment of a \$1 billion project called the Mid-Coast Trolley Corridor, which will link downtown San Diego to La Jolla Village and UC

“ I am living my dream and I will forever work hard to be the best engineer that I can be. ” — *Ketty Avila*

San Diego. "This project is a joint venture of Stacy and Witbeck, Skanska, and Herzog, with our firm being the lead," says Ketty. "In my short career as an engineer I have learned so much, and every single day I learn something new. I absolutely love my job! I have lived in the best cities in the United States, and Stacy and Witbeck has treated me so well. I am living my dream and I will forever work hard to be the best engineer that I can be. I give thanks to the Sacramento State Civil Engineering Department for helping me become an engineer."

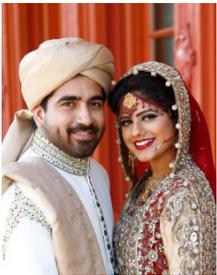


Continued from p.11
Student Profile, Vinh Le Kha



2015... Michael Capili, EIT, has been a busy full-time assistant engineer at Burne Engineering since he graduated, and recently began graduate school. "My professional career has been an extension of my academic career because I continue to learn every single day, in and out of the office," says Michael. "Every project

is different: from designing retaining walls to foundations and structural framing. It has been a roller coaster while learning on the fly. I've been doing what I love to do and continue to love what I do, which is structural design. I wouldn't be where I am today without Sacramento State. And on another good note: I got engaged to my fiancée in August."



2014... After graduating in December 2014, Reaa Ali, EIT, began working at Kimley-Horn and was appointed task and production manager for the Placer County Roadway Safety Signing Audit (RSSA), funded by a Caltrans Highway Safety Improvement Program (HSIP) grant. "Safety becomes really important

in parts of Placer County because there is hilly terrain and lots of curves, often on two-lane highways. We looked at crash data to see where problem segments are located on corridors. We also looked at the retroreflectivity of signage to ensure it met minimum thresholds. My role was technical analysis as well as managing all the technical details, research, making recommendations, coordinating with the project team and client, and then compiling it all into a report which was thousands of pages long. It was a great learning experience. If I looked into the future, this is one of the projects I'd reminisce on." Earlier this year, Reaa relocated to work for Kimley Horn's office in San Jose. She continues to be involved with the American Society of Civil Engineers, particularly its Younger Member Forum. Reaa and her husband, Zain Ijaz, were married in 2015 and are expecting their first child in December.

faced foreclosure on our house, so that year we moved into my in-laws' house and rented out our house. The whole process was really stressful. After my kids went to bed, I would move stuff over to my in-laws' house, then during the day go to school and work. My grades took a dip; it was a pretty hard time. With my in-laws, husband, kids and my parents all living together, it created conflict within the family. After my parents moved out I had to hire a nanny, so there were more financial constraints. In 2014 when I transferred to Sacramento State, I decided to attend full time, because I can take as many units as I want for the same tuition cost. It's like 'all you can eat buffet,' so I try to take 14-15 units a semester to make the money work harder while keeping my full-time job. Caltrans has been very supportive and flexible. I have a lot going on at home and school, but my career is moving fast and smooth so far. To make all this happen, I have to thank those supervisors who helped me along the way: Vong Toan, Eric Olives, Stephen Pozzo and Steve Maan. They made my impossible schedule become doable.

Besides your supervisor at Caltrans, what else has been helpful in your educational journey?

I got help from other students. One of those who helped me a lot was Ayda Soltani. She transferred with me from community college and she's graduating this semester also. I am very grateful to her. A couple semesters I struggled and got Bs and Cs, but most of the time I get As. I expect to graduate with a 3.7 or 3.8 GPA. Dr. Fell really helped me out too. I got quite a few scholarships so I really want to say thank you and would like to be able to stay in contact with the school. If any student has difficulties, hopefully I can give some advice or help. I'm an expert in applying for scholarships. At Caltrans I am a junior civil engineer now.

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ALUMNI SPOTLIGHT



Christian Carleton: The Unexpected Path to Water

The road to becoming a civil engineer isn't always direct, but for Christian Carleton, PH, the experience gained in other disciplines helped him to be sure that water resources was his niche.

"Living in California, water is influential in everything we do, yet we take it for granted," he says. "At least I did growing up. It completely fascinated me and I wanted to learn more."

By the time he arrived at Sacramento State, Christian already held two degrees from UC Davis: a master's in hydrologic sciences, and a bachelor's degree in environmental biology and management with a water resources emphasis. In 2008 he accepted a position as a research engineer and hydrologist at OWP and a

“ Living in California, water is influential in everything we do, yet we take it for granted...It completely fascinated me and I wanted to learn more. ” — *Christian Carleton*

"I wanted nothing to do with math," says Christian, the son of two mathematicians who's now a research engineer and hydrologist for the Sacramento State Office of Water Programs (OWP). His college career started with veterinary study at UC Davis, "then I got an internship in the necropsy lab where the smell of formaldehyde got into my hair, my pillow; I couldn't get away from it."

He looked at the classes he'd taken so far and other majors that overlapped enough to minimize delay to his graduation schedule. "That's where I arrived at the environmental biology and management major," he says. "It was in that major that I was forced to take a water class. I went from showing up late and sitting in the back of the room to the end of the quarter when I was showing up early and sitting in front."

Christian realized that despite his attempts to abandon math, he had chosen a field that heavily involves it.

semester later enrolled in Sac State's civil engineering master's program. With a young family and the full-time job at OWP, he took two classes a semester, steadily working to earn his master of science in civil engineering with a water resources concentration in 2013.

At OWP, Christian's focus "is primarily on predicting and measuring surface water flow, as opposed to groundwater," he said. "We do a lot of work for Caltrans stormwater, looking at the quality and quantity of flow coming off roadways." He also works with the Division of Safety of Dams within the California Department of Water Resources, assisting with the modeling of dam failures and preparing emergency action plans.

Between UC Davis and Sacramento State, Christian spent five years as an associate hydrologist and project manager for Foothill Associates. "It was a really good experience to learn what happens in the real world," he says. "I primarily worked with private land developers





Continued from p.13 Student Profile, Vinh Le Kha

and for Placer and Yolo Counties. That's where I learned all about stormwater. So now I have both the science and engineering background to work with water. I think that makes me unique."

Christian has a great deal of respect for all the civil engineering faculty, some of whom he now works with at OWP. "Dr. Ramzi Mahmood [director of OWP] was and continues to be my professional mentor," he says. "I work with John Johnston and I like the way he's always questioning things and trying to improve them. When I took classes from Ed Dammel and Cyrus Aryani they set a level of expectation for the students to reach, but also did a great job of teaching the material."

He also valued the insight of graduate-level lecturers who taught evening classes while maintaining full-time industry jobs at DWR, Caltrans and local private engineering firms. Christian is now one of the industry voices that help shape the Civil Engineering Department's graduate program as a member of the Environmental and Water Resources Graduate Industrial Advisory Committee. Having started as a graduate student representative, he stayed on the committee as a professional. "It's a way to give back to the university and the department with the limited amount of free time I have."

Christian and his wife Kate have an 8-year-old son, Cooper, and a 5-year-old daughter, Quinn. Their time is filled with coaching the kids' sports teams, working out and a "seemingly never-ending list of home improvement projects."

"My Sacramento State education provided me with a great opportunity personally and professionally," says Christian. "I am so thankful I had the opportunity to do it. All the professors I've dealt with are phenomenal. Just look at the department chairs that I have had the privilege of working with – Dr. Shafizadeh, Dr. Fell, Dr. Mahmood – the quality of those individuals speaks loudly for the department as a whole."

The reason I moved so fast, even though I was working, was that I still applied for higher positions and challenged myself. I think I have a pretty good record and I can help students with that. I want to be a person who appreciates what I have.

Before your job at Caltrans and your college career, did you have any other jobs?

I have a wide spread of experience. When I first came over in 2006 from Vietnam, I didn't speak any English. I came over with my husband but didn't know anyone besides him. It was hard to adjust. So that's why I didn't think I'd be able to go to college. I went to vocational school to get a cosmetology license, and I worked a couple years in Sun City Lincoln Hills, the Del Webb community. The nice older people taught me a lot of American slang. They also encouraged me to go back to school. In Vietnam I was a tour guide, then here a hairstylist, then pre-med, and then civil engineering. My life has been constantly changing, but I feel like I can pull everything together and get through it. Life should be pretty good after [earning my degree]. I'm hopeful.

Vinh hopes to keep in touch with her fellow students at: vinhlkha@gmail.com



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