Your Link to the Department of Civil Engineering **SPRING 2022** | ISSUE 37

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CSUS - School of Civil Engineering



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Screenshots of Participants from Evening with Industry | Pg. 6





CHAIR'S MESSAGE





Dear Colleagues, Alumni, and Friends,

I hope your summer is going well and you are finding some time to rest and recuperate. The last spring semester was our first in-person semester in almost two years, and a welcome relief for students and faculty alike. We are all eager to begin the journey towards the new "normal" given the experiences of the pandemic years. There were several challenges in coming back to an in-person semester. As always, with the help of dedicated

faculty and staff and strong industry support, we successfully navigated through the challenges and accomplished a lot, as highlighted in this issue of the CE Connection newsletter.

I want to specially congratulate Mr. Juan Maya, who was selected as the recipient of the 2022 Outstanding Scholastic Achievement Award in the department. Juan's story (presented in this issue) is inspirational and not unlike many of our undergraduates. He is an exceptional student with a bright future ahead of him. When faculty like Professor Aryani express their regret at Juan electing to take a Water Resources course rather than a geotechnical one, it says something about the student's caliber. In my opinion, there is no higher praise for a student. We are very proud of you Juan.

While there were several activities and moments of pride in the Spring semester, I want to particularly point out the retirement of Professor John Johnston and express my bittersweet feelings. Since the day I joined the department, Dr. Johnston has been a personal friend and mentor to me and many other faculty in the Dept. More importantly, he has been an invaluable part of the Dept. with his dedication, commitment, and sense of responsibility towards students and their learning. We will miss Dr. Johnson and it will be difficult, if not impossible, to fill his shoes. I want to congratulate him on a successful career and well-earned retirement.

With that said, we are ready to welcome a new faculty in the Environmental Engineering area in the fall and more news on that will follow in the future. For now, please enjoy this issue of the CE Connection.

Yours sincerely, Ghazan Khan Chair, Department of Civil Engineering





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 Provides support for faculty and student enrichment activities.
- The CE Freshman Scholarship Fund—Scholarships to an outstanding first-year student.
- The Graduate Environmental/Water Resources Scholarship Fund — Scholarships 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 http://bit.ly/ceonlinedonate and follow the directions for online donations. Or mail a check made out to the appropriate fund to:

Attn: Ashley Mihok California State University, Sacramento Department of Civil Engineering 6000 J Street, MS 6029 Sacramento, CA 95819 For additional questions on how to give, contact:

Nebrisa Fish Director of Development (916) 278-2453 nebrisa.fish@csus.edu

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Upcoming Events

November 2022

Evening with Industry

Check back in the next issue for more details on this event.

Please consider supporting the Department of Civil Engineering.

As we transition back to our in-person traditional events during the year, and on-campus classes, your dollars will be incredibly important to support the department.

http://bit.ly/ceonlinedonate

www.csus.edu/ecs/ce

Like us, and follow us to stay up to date on current CE News and Events!

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Evening With Industry: New Expansions on the Horizon in Folsom







Engin

An Evening with Industry was held online in early November 2021 and despite the limitations of an online setting continued to draw numerous students and participants to discuss real-world applications of the world of engineering outside school.

CSUS - School of Civil

Engineering



Ghazan Khan, Dept. Chair, began by welcoming everyone to Sac State's annual event and took a moment to thank those organizations that continually sponsor the Department of Civil Engineering. After further introductions were made, the floor was given to Rob Aragon, founder of Aragon Solutions and current partner of Westland Capital Industries.

"I love what I do," Aragon began almost immediately.

"There's not a day that I get up that I'm not invigorated and motivated to solve problems and collaborate with various industry components that are about creating communities."



While still attending Vacaville High School, Aragon became a draftsman for the City of Vacaville Public Works Dept. As a draftsman in the late 70s, he created exhibits for city council agenda meetings. Aragon stated that he received abundant direction from those in the office with him, and they encouraged him to pursue his career, to the point where he was allowed to accompany the survey crew to learn more about their work out in the field.

During college, Aragon met Bruce West of NV5 at a fraternity luncheon. He promised to keep Aragon in mind if anything opened up at the company, and in 1981, true to his word, Aragon was hired. He would stay with the company for more than twenty years. Though he was hired on as an intern, by the time he left two decades later, he had been made a partner. He joined JTS in 2004, and then formed his own company, "Aragon Solutions," with the focus of managing real-estate assets for those who were new to property management and its development.





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Westland Capital Industries hired Aragon in 2009 and tasked him with finding opportunities that had, "limited infrastructure constraints," that would be good investments. Current projects include development of the Bickford Ranch area in Lincoln, CA and Eastbridge area south of El Dorado Hills. The biggest project by far, however, involves the Folsom Ranch area, which is just south of Highway 50, on the other side of Iron Point and Blue Ravine Road. Aragon's job has been to be the "quarterback" in concert with engineers to move anything involving Folsom Ranch forward—obtaining land, zoning specific areas for residential and commercial use, and preparing the environmental clearance as required by the state and county.

We have, essentially, created a 'city within a city,' if you will."

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Much of the work that has been completed thus far is preparation for the major infrastructure that will be developed over the next decade. One such project includes completion of a major sewer line in the Folsom Ranch area. It connects with the main Sacramento County line at Iron Point road, which will deliver the water for treatment all the way in Elk Grove. Roughly 15,000 feet of connection was added, including a lift station. Currently the Ranch project houses 11,000 entities, including 5 elementary schools, one middle school, and one high school. There are planned parks, nature areas, and public access trails.

"We have, essentially, created a 'city within a city,' if you will," beams Aragon at his company's progress thus far.

At the conclusion of Aragon's presentation, the panel of speakers was introduced. Guests included: Melanie Holton of Brown and Caldwell, Spencer Ord of the Dept. of Transportation, Karman Cates with Bennet Engineering Services, Adrian Engel with Fehr and Peers, Abel Gomez with Mackay and Somps, Arashdeep Singh, Assistant Project Manager at HDR, and Patti Clawson with WCD and Associates. Each panelist answered questions submitted by students and read by Dr. Khan before separating into breakout rooms to allow students to visit with industry leaders nearly one-on-one. Though the desire to be in person was felt by all, the event was a success, with students grateful to have the opportunity to meet and talk with professionals in their interested fields.

PRECAST BRIDGE STUDIO STUDIO WINS COMMUNITY ENGAGEMENT AWARD

KANSAS CITY, MISSOURI

In January, the PCI Foundation announced that Professor Eric Matsumoto and the Sac State's Precast Bridge Studio was the recipient of the 2021 PCI Foundation Community Engagement Award. The award is presented annually to faculty of universities who strive to create significant and memorable experiences for students. This provides real-world examples and helps to cultivate critical problem-solving skills that can be applied to life outside the boundaries of the university.

Award

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This course has allowed Dr. Matsumoto and I to break down the traditional academic silos amongst CE and CM disciplines, resulting in opening up opportunities for collaboration amongst students in a truly full cradle to grave designbuild project...

FOUNDATION

January 25, 2022

Eric Matsumoto California State University 6000 J Street Sacramento, CA 95819-6029 <u>ericm@csus.edu</u>

Dear Eric

With this letter, I am delighted to confirm that you are jointly the recipient of the **2021 PCI Foundation Community Engagement Award** for your work on the Sacramento State Precast Bridge Studio. Having worked with schools of architecture, engineering and construction management for the last 14 years, the PCI Foundation recognizes that one of the ways students learn is through meaningful experiences. Therefore, we would like to recognize your work in using precast to not only engage with your precast students, but also to partner in a meaningful way with the community. You were nominated by Ruth Lehmann of the PCI West and Brent Koch of Con-Fab California and the award was affirmed by the PCI Foundation executive committee in January 2022.

In her nomination, Ruth noted

As an educator and researcher in the area of reinforced concrete (specializing in prestressed concrete), Dr. Eric Matsumoto recognized the pressing need to not only educate students on the design of prestressed concrete transportation elements but also to create opportunities for civil engineering/construction management students and the transportation industry to interact, creating a path for students to be hired into the transportation design/construction industry with "boots on the ground" skills to begin design work on day one of employment.

This award is given to a professor whose work

- Enhances opportunities for students and staff to participate in community-based learning, service and/or research activities.
- Demonstrates sustained scholarship, research and significant capacity building.
- Demonstrates a significant impact with a tangible benefit to the community
- Involves a community partnership.
- Focuses on a specific community-identified need or opportunity.
- Fosters an exchange of knowledge and expertise among partners.
- Contributes to the enhancement of the PCI Foundation's reputation as actively and meaningfully engaged with its community and region
- Demonstrates the ability to influence public policy and practice nationally and/or internationally in relation to community engagement, and
- Extends the PCI Foundation Mission

ated in his letter of endorsement

company and our industry that is resulting from the well-trained and solution being produced by the CSUS PBS.

Dr. Eric Matsumoto and Professor Mikael Anderson (Chair, Dept. of Construction Management), the co-founders of the Precast Bridge Studio, have spent the last few years creating such an environment for their students, and have even managed to continue their work despite the pandemic ripping through a sizeable chunk of the Studio's existence.

Ruth Lehmann, PE, the Executive Director of the PCI West Chapter of the Precast Concrete Institute, had this to say when nominating the Studio and Dr. Matsumoto for the Community Engagement Award:

"As an educator and researcher in the area of reinforced concrete (specializing in prestressed concrete), Dr. Eric Matsumoto recognized the pressing need to not only educate students on the design of prestressed concrete transportation elements but also to create opportunities for civil engineering/construction management students and the transportation industry to interact, creating a path for students to be hired into the transportation design/ construction industry with "boots on the ground" skills to begin design work on day one of employment."

Dr. Matsumoto stated that he was, "pretty surprised," that he had been both nominated for and won the Engagement Award, but while his may be the face of the Studio, it's not just about him.

"This [the Engagement Award] represents the 'team' contribution of Mike [Professor Anderson] and many, many industry mentors and members," Dr. Matsumoto commented, giving credit to his fellow colleague, who in turn also gave Dr. Matsumoto his highest regards.

"This course has allowed Dr. Matsumoto and I to break down the traditional academic silos amongst CE and CM disciplines, resulting in opening up opportunities for collaboration amongst students in a truly full cradle to grave design-build project," commented Professor Anderson.

Congratulations to Dr. Matsumoto, Professor Anderson, and the entire Precast Bridge Studio team on yet another outstanding recognition for their innovations and leadership in the precast field.



THE 13TH ANNUAL KENKERRI Endowment Fund

LUNCHEON







Preview

The Ken Kerri Luncheon has been a traditional part of the Dept. of Civil Engineering for a decade. The event brings together staff, faculty, industry employees, and alumni for an afternoon of good company and memories of Dr. Kenneth Kerri, who contributed extensively to the expansion and development of the College's program until his death in 2014 at the age of 80.

For the past two years, the event has been absent from the campus Dr. Kerri devoted his life to, in an effort to protect and preserve the lives of our community in the ongoing struggle against Covid-19.

This year, however, the luncheon made a triumphant return as an in-person event, bringing together more than 100 attendees to celebrate the legacy and the achievements of the Dept. made possible by the legacy of Dr. Kerri.

Check back in the summer issue of the CE Connection for our full article on the event.

Retirement Announcement: Saying Good-bye to

Professor John Johnston

This past January, Professor John Johnston retired from California State University after thirty years of involvement with the CSU system, almost 25 of which were spent at Sacramento State. During his tenure at Sac State, Dr. Johnston taught nearly all the different courses in the environmental engineering area, and several in water resources. He also worked part time at the Office of Water Programs, a research center on campus. Recently, he reflected on the many ups and downs of his time at Sac State: "You can measure a career by accomplishments like papers and classes, but you also have to reflect on the people who were part of that career – how they helped you and how you might have helped them. I've been fortunate to work with some very fine people."

"It certainly was a harder job than I expected," he admits, "but I got a lot of satisfaction from being part of a program that launched young people into life-changing careers. It's been gratifying to see their successes."

Like many of the faculty, John strived to create a high quality, but supportive learning environment for his students, but that became a struggle during the pandemic.

"I think I enjoyed the lab classes the most," he continues. "The hands-on problem solving was particularly fun; cleaning up afterwards, not so much. I used to finish up every course with plans for how to do it better the next time. Then Covid hit. Reworking the class material for remote delivery challenged my creativity. I'll never forget teaching online from my spare bedroom and shooting one-take lab videos on the fly. I'm sure standards suffered some. I really missed the more personal interactions with students where a lot of learning happens."

Dr. Ramzi Mahmood, who was the Department Chair from 2003 to 2012, recalls speaking about that dedication from Dr. Johnston with students. He recalls,

"I used to conduct exit interviews for all graduating seniors. During these conversations with the students, John Johnston was...mentioned consistently by students as being tough (holding high standards) and caring about their well-being and success. As a department chair, I truly appreciated to hear that from students." Dr. Johnston plans to work on selected projects for OWP and finish up his appointment to the Davis Natural Resources Commission.

At OWP, John was a technical advisor to a wide variety of projects. "For years I worked with the research group on stormwater quality issues," he explains. "Stormwater was a pretty new topic when I started and OWP made some significant contributions to the profession. Lately, I've been helping on water conservation studies for the state and creating online training materials for wastewater treatment plant operators."

After retirement, Dr. Johnston plans to work on selected projects for OWP and finish up his appointment to the Davis Natural Resources Commission, which advises the city council on environmental issues, including climate. Although he hasn't made any big travel plans, there is one trip that intrigues him.

"On my commute into school every day I passed a signpost on Highway 50 saying that Ocean City, MD is 3073 miles away. I've always thought it might be fun to keep driving past Sac State and see if that's true."

We wish John the best in all things going forward—and if he does take that trip to Ocean City to please send the Dept. a postcard when he arrives.

RESEARCH FOR CALTRANS WINS AWARD FOR INNOVATION AND SAFETY

Dr. Ghazan Khan's research on behalf of Caltrans, titled "Evaluation of Work Zone Intrusion Alarms," was nominated for, and won, a High Value Research award from the AASHTO Research Advisory Committee (RAC). The project and associated research aim to test and explore the use of devices that, when triggered, alert roadway and maintenance workers that a vehicle has intruded into the work zone, and allows the workers to take timely evasive action.



...the thing that gets me out of bed every morning is that my work has a direct effect on saving someone's life.

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According to Dr. Khan, there are already specific state and federal guidelines that maintenance workers must follow, and that the devices are "supplementary measures," but that Caltrans wants to do more to protect the lives and wellbeing of its employees. He states, "Caltrans wants to research what type of systems are available, whether they are applicable or not, and what the practicality is of their implementation." The hope is that, by utilizing and implementing these systems, that Caltrans can reduce injuries and fatalities caused to workers by motorists who veer into the work zone unintentionally.

To this end, Caltrans requested Dr. Khan's assistance with researching which alarm systems stood out in terms of safety as well ease of setup for the workers. Research was divided into two parts. For the first phase, conducted between 2017 and 2019, Dr. Khan and his team—including two graduate and four undergraduate students at Sac State—conducted evaluations at the Caltrans Equipment and Training Academy in McClellan, CA. The site, which is used for training maintenance workers, has a road surface and equipment such as what would be found at a real job site. These were utilized for testing of the intrusion alarms in a controlled enclosed environment.

The pandemic put a halt on further research in 2020, but in early 2021 Dr. Khan was informed that Caltrans was ready to move forward with a second phase of testing. "We were asked to select five systems...to take out to active work zones on California workways and have crews deploy, use, and retrieve these devices...so we could see the practicality of their use in the real world." Preparations for this phase of the testing will include training two Caltrans teams on how to use the systems, how to set them up, and how to respond should an alarm be triggered by a straying motorist. The research team will observe and evaluate the workers as they use these systems in a real work zone, and any response to alarms triggered, as well as their personal and direct feedback: were the alarms too loud, or too soft? Were the devices too cumbersome to set up efficiently? Was the very act of setting up the devices causing unnecessary danger to the workers?

That portion of the research will be completed in fall 2022. The goal is to evaluate the pros and cons of each system to provide Caltrans recommendations about which devices should be considered to protect the lives of roadway workers—and not just on California highways. Several other states, having shown an interest in the results of this study, have contributed funding, pooling resources in the hopes that the research will help protect roadway workers of all types across the country.

While Dr. Khan is honored to have his research recognized for its importance and ingenuity, his focus remains solely on lives saved, and opportunities for his students to see such life-saving research in action.

"I have been given this opportunity to contribute to, and make an impact on, something that is so immediate, which is saving the lives of our construction and maintenance workers." Dr. Khan notes, making reference to the estimated 100 lives lost each year. "As a transportation engineer and as someone who has worked on traffic safety for nineteen years, the thing that gets me out of the bed every morning is that my work has a direct effect on saving someone's life. Even if that means a single life is saved, I can't think of any greater impact."



Award Presented to Civil Engineering Undergraduate This year's recipient of the Dept. of Civil Engineering, Outstanding Scholastic Achievement Award goes to Juan Manuel Maya who graduated in May 2022.



"This award was a great surprise," Maya writes when asked about what the award means to him personally. "Academically, I knew I was doing well because I knew what my grades were but learning that the Civil Engineering faculty thought so highly of me was an honor. Winning this award gave me complete confidence in my academic skills and validated my hard work and dedication."

Hard work and dedication are not strange concepts to Maya. Born in Mexico and immigrating to California at a young age, Maya struggled to learn English, and was able to graduate from high school. Over the years, as his English skills improved, the thought of returning to school to pursue a higher level of education remained with him. Eventually, Maya earned an A.S. degree in Pre-Engineering, and set his sights on an even bigger prize: the Civil Engineering Program at Sac State.

"With a wide range of work opportunities, the Civil Engineering discipline gives students endless opportunities to find a career path they feel passionate about. I personally found water resources engineering to be fascinating, especially the areas of groundwater engineering and stormwater management," reflects Maya.

Although the majority of Maya's upper-division education took place online due to the Covid pandemic, Maya maintained a high GPA, was enrolled onto the Dean's Honor Roll, and the local chapter of the Civil Engineering Honors Society, Tau Beta Pi Upsilon.

In the earlier part of the year, the university received candidates submitted by the various departments for the Outstanding Scholastic Achievement Award, which is open to all undergraduate students. "Dr. Khan informed me that I was nominated by the civil engineering faculty for the...award and requested a statement highlighting my achievements both academic and professional," recalls Maya. "A few weeks after submitting my statement, I received the great news that the CE faculty had selected me as the award winner."

Having finished his degree in May, Maya is setting his sights on the future. "Now that I have completed my undergraduate Civil Engineering degree, my plan is to attend graduate school and complete a Civil Engineering M.S. degree with an emphasis in water resources. I would love to see my engineering research and designs benefit the public for many generations to come."

The Civil Engineering Department is proud to congratulate Juan Maya on his successes and his incredible achievements.

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... I would love to see my engineering research and designs benefit the public for many generations to come.



Support for CIVIL ENGINEERING GOES A LONG WAY

A first-generation student receives a scholarship to make her dream of becoming a transportation engineer a reality.

A faculty member receives the ecstatic news that his request for a grant to continue his research into transportation improvements around the Sacramento region has been approved.

An endowment fund set up by an Alumnus funds the replacement of old lab equipment with up-to-date, state of the art technology to train a new generation of undergraduate and graduate students. These are the stories and experiences of real students and real faculty members that make up the Dept. of Civil Engineering. They are our stories.

Without your generous donations and support, these stories would be few and far between. Instead, they are numerous in count, inspiring in circumstance, and exemplify the will and determination of our students and the staff that work endlessly to support their endeavors.

If you or your organization would like to consider making a donation to the Civil Engineering Dept, either by scholarship, sponsorship, or to make a direct contribution, please contact Ashley Mihok in the Civil Engineering Office at (916) 278-6982 or <u>ashley.mihok@csus.edu</u>.

To those of us who have supported or are considering supporting our program—thank you! Your belief in us and the work that we do is truly appreciated.



In memory of Professor Anthony Caruso

The Dept. of Civil Engineering is saddened to report the passing of Professor Anthony Caruso, who was a beloved colleague, mentor, and visionary for three decades of students and faculty.

Born in 1937, Caruso moved to southern California at the age of eight, and eventually graduated from a local high school. He pursued and obtained a degree in Petroleum Engineering from UC Berkeley in 1958. One year later, he married his wife, Diana, with whom he would have seven children. He would go on to receive his master's degree in Civil Engineering at Sac State. He completed coursework towards his doctorate at UC Davis and was enlisted in the United States Navy for twenty years both in active and reserve service.

Professor Caruso was a Civil Engineering instructor at Sac State for thirty years, where he taught Engineering Economics, Engineering Statistics, and Transportation Engineering. Professor William Neuman, who taught and worked alongside Mr. Caruso throughout his career, shared that while Caruso enjoyed teaching immensely, he was the "quintessential Italian," in that he never dressed up for work.

"Tony' and I were office partners for about eight years when faculty did not have separate offices," remembers Neuman. "When Santa Clara Hall opened and faculty finally got separate offices he furnished his office with his own furniture, and disdained the State issued chair, desk filing cabinet and bookshelf. I felt that he and I were great friends." When reflecting Caruso's devotion to education, Neuman stated, "He taught because he believed in his students and the mission of CSU."

While his career included pathways familiar to many undergraduates, such as working with the Department of Water Resources, he also successfully invested in real estate for many years. Caruso obtained his California Civil Engineer License in 1965 and his State Contractor's license in 1972, and in 1987, he was a founding member of ECOTECH, which was a research and development company.

In retirement, Caruso enjoyed traveling and photography, and loved spending time with his wife of sixty-four years, and their children, twentyseven grandchildren, and six great-grandchildren.

"Family was his first priority," said Neuman.

Anthony Caruso passed away on January 8th, 2022 He will be greatly missed by his Sac State family, and we will be forever grateful for his contributions and his commitment to helping his students reach their goals.



He's on the Move:

Transportation Engineering with Steffen Berr





In the summer of 2019, Steffen Berr was interviewed by the CE Connection to discuss his life as a Sac State Alumnus working in the Bay Area. His goals at the time included ways to improve cyclist access to roadways, and studying the systems established in areas such as the Netherlands, where, "...nearly fifty percent of trips in cities...are made by bicycle."

The Netherlands' systems were so impressive, in fact, that Steffen is now residing there.

"One thing that got me into the whole 'transportation experience' to begin with was that I saw how radically being able to do simple things, like walking, or taking the bus, could transform a public space in the sense of community," Steffen recalls of past visits to Europe. He'd been considering moving to Europe as far back as that first interview--holding dual American and German citizenship would make such a transition fairly simple, even to the Netherlands.

"They have the best active infrastructure in the world," Steffen admired, referencing walking and cycling specifically. "When you work in the transportation area you always hear about the amazing projects that are going on over there." After moving to the Netherlands in February 2021 Steffen hunkered down and looked for work, and after several months, he finally scored an interview with Arcadis, an engineering consulting firm. However, they were reluctant to hire him, even after an impressive second interview, due to concerns over his ability to speak enough Dutch. Steffen, sensing he was about to be turned down, requested one final interview in three months' time—with the caveat that the entire meeting would be spoken in Dutch. Having nothing to lose, Arcadis agreed, and Steffen spent the next several weeks immersing himself in the language 24/7. His hard work paid off: at the interview in October 2021, he was hired.

"It was a ton of work," Steffen admitted, "but this is what I love."

Nowadays, Steffen is a Civil Engineer Designer. "A lot of transportation projects will begin with a route selection and concept path where they will decide where something like a bike path will go, how it generally will be set up, how it will cross intersections and so on. My job with the team is to design the specifics, such as the elevation gains and drops, the curvature of the road, the cross-section width of the bike path, where the curbs will go and the types of curbs, how to redesign the intersection to accommodate cyclists, etc. This all gets done on AutoCAD."

Steffen continues to be amazed at the efficiency of transportation in the Netherlands, citing as an example the ease in which he is able to board a train in Amsterdam and take it across the country to get to work every day. He believes part of the Netherlands' superiority is their focus on creatively fixing problems and not being boxed in by codes and regulations—in a sense, the "driver experience" is a greater influence, with the codebook used to ensure proper quality control. Safety is given priority, and is not compromised to make "multimodal" roadways that increase both speeds and potentials for injury. In an effort to promote this unique outlook on transportation engineering, Steffen has written and published three articles on ways the American education system, and the transportation system as a whole, can learn from the Netherlands.

In addition to his articles, Steffen operates a TikTok account and YouTube channel that showcase specific highlights of Dutch infrastructure. He also hopes, in the coming future, to open his own consulting firm to help American engineers navigate incorporating some of these international processes into newer transportation developments in the States.

"There's this idea that in the Netherlands, it's 'Medieval,' and they have very old cities and can just walk everywhere because it's so compact," Steffen states as he discusses these possibilities. "That's not really how it is. Most developments are completely new, and younger than many American suburbs. There are definitely things we can do to make things safer—and there are a lot of lives we could save. If we adopted Dutch systems, we'd be saving thirty thousand lives every year. Over ten years, that's three hundred thousand lives. Seeing the numbers is very sobering, knowing we don't have to live like this. We can help so many people."

Anyone interested in learning more about Steffen's experiences and his insights into engineering is welcome to visit his TikTok channel: @steffthetranspodude

It was a ton of work . . . but this is what I love.

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Save the Date! Our Annual Civil Engineering Golf Tournament is Now Two Digits Strong!

It's turning ten! The 10th Annual Civil Engineering Golf Tournament is taking place in the Fall.

WHEN: Tentatively scheduled for Friday, October 14th, 2022 | 7:30 am

LOCATION: Top Golf—Roseville, CA

Details on number of people in each group and registration information will follow soon. Students will also be invited and will be matched with students interested in the general area of the firm's business.

Proceeds support the Sacramento State Department of Civil Engineering..

For more information or to register please use the link below or contact Ashley Mihok at <u>ashley.mihok@csus.edu</u>.

PHOTO CREDIT: Andy Steele





Thank you for the support! The following companies or agencies sponsored the department or individual events during the 2022 calendar year. If your company sponsored an event during the 2022 calendar year but is not listed here, or if you would like your company's listing removed for privacy reasons, please contact Ms. Ashley Mihok at ashley.mihok@csus.edu or Dr. Ghazan Khan directly at (916) 278-6982 or khan@csus.edu



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