

## **CONTACT US**

## **ASCE BRUIN NEWSLETTER**

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## A Letter FROM THE PRESIDENT

It is to my profound honor that I present to you the Summer/Fall Edition of the ASCE Bruin. In this edition, you will see the energy and growth that has become so characteristic to Spring Quarter for ASCE. From seeing our projects compete in their final tests to watching our chapter earn multiple awards and honors, it has certainly created for a thrilling time. It was indeed a quarter of growth as ideas like the Rising Star Scholarship and the Research Opportunities Info Session were introduced by our Officers. A Mentorship Program with new families and lineages was instated well before the Fall Quarter so that the program can hit the ground running once school resumes. Meanwhile, the academic year concluded as young members quickly stepped in to take the mantle that the graduating officers left behind. Whether it is quickly glancing at the pictures or reading every single word of this edition, I do sincerely hope you are at least left with a smile on your face. We had a fun quarter.

Spring Quarter is an amazing time in ASCE as it is the ultimate culmination of hours upon hours that students have put into their projects. While ASC 67 concluded their year in the Winter Quarter at their respective conference, many of our projects have had yet to showcase their hard work. Indeed, that was the case this year as significant strides in improvement were made by our projects whether it was through final result or through the strong development of future leaders. Pacific Southwest Regional Conference (PSWC) was held in Long Beach, California this year. Concrete Canoe obtained first place and in doing so secured their second consecutive and esteemed bid to Nationals. They would later go on to achieve second place at Nationals. In addition, Environmental Design continued their success from last year and also earned first place. Steel Bridge profoundly built upon previous years to have earned fourth place. In summary, all five projects finished above sixth place. However, our unprecedented success did not stop with the projects as we finished with top 3 finishes in volleyball, ultimate frisbee, and basketball. The widespread strength of ASCE at UCLA was shown as we won FIRST PLACE at PSWC for the first time since 1994. ASCE at UCLA also sent their Seismic Design team to the EERI Seismic Design Competition in San Francisco this past quarter. This year they introduced an innovative structural system/rendering and thoroughly developed the next generation of Seismic Design leader who will build upon this past year.

Another reason behind the energy of Spring Quarter is how it is a period of growth and transitions. Outgoing officers began to instill in the younger generation, strategies and advice on how improve upon their own positions. This year was unlike any other year in part to the massive turnout and interest members had in officer positions. At Core Elections, seven members ran for four positions. During General Elections, there were 22 candidates for 12 positions. It was unequivocal evidence showing how many people have bought into ASCE as well as many leaders were being developed.

"The widespread strength of ASCE at UCLA was shown as we won FIRST PLACE at PSWC for the first time since 1994." In addition to strengthening the next leaders of ASCE at UCLA, we also had the honorable responsibility to inform and convince prospective students to come to UCLA. It was a great platform to advertise and encourage them to join our student chapter. By partnering with the Department, we were able to achieve both goals and help one another out. The Department even asked us to print out 120 copies of the ASCE Bruin: Winter Edition to hand out!

Our chapter continued to strengthen our ties to professors through the traditional Student-Professor BBQ but also through a brand new event introduced this year in the Research Opportunities Info Session. It was a huge success in terms of the turnout from the Professors, the presentations, and the feedback from members. The academic year for ASCE at UCLA concluded with the inaugural Banquet held in the Faculty Center. The professionally planned event consisted of a speech from newly appointed Dean Murthy, a presentation of the Region 9 Distinguished Chapter Award from Mr. Higgins, and recaps conducted by outgoing project leaders.

ASCE members have every reason to be proud of their club. The 2015-2016 Officer Board worked tirelessly to put their student chapter in a position to succeed. New ideas, such as the Rising Star Scholarship, were implemented to encourage and develop young student leaders. Seismic Outreach conducted their Finale Day this past quarter and somehow improved an already amazing program. Through the usage of defined teams and team leaders, the middle-school students were thoroughly engaged. The recognition arrived for our chapter through the forms of winning first place at PSWC, achieving the Region 9 Most Distinguished Student Chapter, and earning the ESUC Most Popular Student Engineering Organization and Best Large Student Organization. This past year and all its recognition belong to the 2015-2016 ASCE Officer Board and members. Their tenacity and care for ASCE are values we strive to emulate.

I would like to thank all those who sponsored and supported ASCE at UCLA. Through your generosity, compassion, and willingness to provide help, ASCE was able to reach the level it has this year. I would also like to thank our alumni, advisors, the UCLA Civil and Environmental Engineering Department, and our corporate sponsors. Beyond their backing is a relationship that we deeply value and one that I hope we continue to see strengthen.

I assure you that we will continue to develop our club, find ways to benefit our members, and ultimately make you proud. Through the model of excellence the outgoing officer board has shown us, ASCE at UCLA 2016-2017 is prepared and ready to take on the challenge. So all that is left for me to do is to ask you—will you follow us once more?

Sincerely yours,

**Suraj Patel**, President ASCE at UCLA 2016-2017 "New ideas, such as the Rising Star Scholarship, were implemented to encourage and develop young student leaders"











## **MEMBERSHIP**

## **CHRIS JANSEN**

I want to thank everyone that has been actively involved in ASCE at UCLA throughout the 2016 school year. Whether you have been a part of our group since the beginning, or whether you signed up late in the spring quarter, you are all equally awesome! Because of you, we finished the year with a total of 242 paying members within our organization, which surpasses last year's membership count by a whopping 7%! This also surpasses the goal set at the beginning of the year of reaching a membership count of 240 members.

By tracking member involvement throughout the year, we were able to present the first ever "Member of the Year" award with the intent of recognizing the most actively involved individual within ASCE at UCLA. When selecting a winner, it was to no surprise when Ruby Kalra's name came up, as she has consistently participated in a wide range of ASCE events throughout the year. When you get the chance, please congratulate Ruby on a job well done! She certainly deserves it.

After a year of blood, sweat, and tears, the hard work of our members have lead to some truly groundbreaking results. For example, this year's high project involvement and large turnout at the Pacific Southwest Conference (PSWC) lead to a first place victory for UCLA! Additionally, our ambitious officers put together over 80 events this year, and yet the attendance at these events remained elevated. Just to illustrate, we had an average of 57 people show up to general ASCE events which included things like general meetings, open house, and elections, and an average of 47 people came out to our professional events as well. Our overall average number of attendees per event was 37, which is just outstanding. So pat yourself on the back everyone; you have all done an excellent job!

As I end my term as the 2015-2016 membership chair, I would like to once again thank everyone for the wonderful experience I had as a first time ASCE officer. The members as well as the officers that I had the privilege of working with over the past year have really made this position enjoyable.

Finally, as I step down from my position I would like to present to you next year's membership chair: Johnny Schmidt. I am fully confident that Johnny will continue to increase our membership count, as well as the overall member experience and member involvement through new and innovative ideas. He is an intelligent man, and I know that he will continue to make ASCE better as he excels in his first officer position. I could not have asked for a more qualified person to take over as next year's membership chair. You are all in good hands!

"Because of you, we finished the year with a total of 242 paying members within our organization, which surpasses last year's membership count by a whopping 7%!"

## INFO SESSIONS & WORKSHOPS

## **ERIC ROBERTS**

To conclude a phenomenal year of professional events, our chapter had the privilege of hosting LADWP for the final information session of the year. Two LADWP representatives delivered a fantastic presentation regarding the systems involved in delivering water throughout Southern California. The pipeline networks, water treatment facilities, and the actions taken to combat the drought were heavily emphasized, providing members with an opportunity to understand the important role the public sector has in sustaining the most vital of resources. At the conclusion of the event, many undergraduate and graduate students remained to network with the speakers and pursue further questions pertaining to careers with a government agency and work in the public sector.

This captivating, engaging event serves to echo the goals we established at the beginning of this school year, and were ultimately able to achieve. With over 15 information sessions hosted this year, we were able to entertain firms from structural, water resources and hydrology, environmental, transportation, construction management, consulting, and materials science backgrounds. We demonstrated our promise of providing an immensely diverse set of companies to satisfy the demands of our highly motivated student members. To complement these information sessions, we also hosted resume workshops and career fair bootcamps prior to both Career Fairs in the Fall and Winter. In addition to strengthening existing relationships and developing new ones, the attendance at all professional events was at an all time high.

With another successful year in recap, I am excited to announce Damian Gutierrez as next year's ASCE at UCLA Speaker Coordinator. Damian is extremely hardworking and committed to ensuring that our ASCE chapter has even more opportunities available this upcoming year. There is lots to look forward to this coming year, as our chapter continues to promote a stronger professional presence each year. Go Bruins!

## FIELD TRIPS

## **ASIA REEVES**

ASCE at UCLA took three field trips/site tours in the spring quarter of this year that saw some amazing turnout. We visited Taslimi Construction, got a tour of the new Luskin Center built right on our campus, and also took a site tour led by Turner Construction of the Wilshire Grand in downtown Los Angeles. The general turn out for each of these trips was on average 20 students. At Taslimi, students learned in depth the construction management process. At the Luskin Center, students walked the almost finished site and learned about the process of constructing it. Lastly, students got a tour of the Wilshire Grand by Turner Construction, and were able to go to the 70<sup>th</sup> floor of the building. With all the great success field trips has had this year, I am sad to say that my reign as field trip coordinator has come to an end; however, I am confident that next year's field trip coordinator, Kasey Murakami, will do great things with the position. Next year I expect bigger and better field trips, and maybe even an overnight one.



## **GRADUATING CLASS AT ASCE BANQUET**

All of our graduating members at the Annual ASCE at UCLA Banquet.



## **LUSKIN CENTER FIELD TRIP**

Student members visit the recently built UCLA Meyer and Renee Luskin Conference Center.



## ASCE at UCLA CLASS OF 2016

Our members from the graduating class of 2016 posing for an epic picture.

## COMMUNITY SERVICE

**MONICA CORBIN** 

In Spring quarter, we had two events, both with great turnouts. Our first event was a Heal the Bay beach cleanup. It was a joint event with LA YMF and afterwards we all enjoyed a beautiful day hanging out at the beach. Our second event was another joint event with LA YMF. We worked with them and the ASCE chapter of CSULA to put on an outreach day for third grade students at Clover Elementary School. We taught students about what civil engineers do and then helped them build structures out of toothpicks and gumdrops that were tested on a shake table. Next year Leighton Paradis will be taking over as the new community service chair. You can expect some more great one-day community service events and hopefully the implementation of another long term community service project.

## ASCE at UCLA AT CLOVER ELEMENTARY SCHOOL

Our members with some other students from ASCE chapter of CSULA at the outreach day.



## STUDENT MEMBER HELPING OUT SOME KIDS

One of the members assisting the kids in building a gum and stick structure.



## ALUMNI & PROFESSORS

## JUSTINE GEE

In order to wrap up this past year we hosted our annual Spring Student-Professor BBQ. The BBQ is always a nice way of wrapping up the year, and spending time with our professors outside of the classroom. As always, there was both a large student and professor turnout; there was even a small alumni attendance! The event was hosted at the home of Professor Sabol and, this time, tacos were on the menu. The food was prepped and cooked by our very own kitchen crew. The food seemed to be a huge hit, which can be proven by the small amount of leftovers at the very end of the night. Being spring, the weather was perfect, and it was a nice night of enjoying food and each other's company in the backyard. Thanks again to Professor Sabol for opening up his home for this annually anticipated spring event.

In addition to the BBQ, we hosted our first Research Info Session. It proved to be a very successful event that will hopefully be able to be carried onto next year as well. At this event, different Civil and Environmental Engineering Professors were invited to briefly explain their current research work and then tell students how they could get involved in research at UCLA. Each field of civil engineering was represented at this event, which was able to provide the students with a large scope of all that civil engineering has to offer. There was a large student turnout, showing that many are really interested in being involved in research. The hope is that this event was able to act as a stepping stone for students who do not know how to initially get involved in research. I would like to thank Professors Stewart, Brandenberg, Jay, Burton, and Wallace for not only attending the event but for also speaking at this event and giving students insight into their incredible work.

This past year as Outreach Chair has really been a great and rewarding experience, and I have really come to love my position. I have had a wonderful time getting to know some of our alumni, which includes sending them lots of emails and even being able to work side by side with them. It is also been fun getting to know some of our professors on a different level, from the emails to the office visits to cooking in their homes. I really have come to appreciate the dedication of our CEE Professors to be engaged with their students outside of the classroom. I hope that you have also been able to enjoy an event or two where you have also been able to make connections and relationships with fellow students, alumni, and professors. Next year, Jenny Li will be taking over as Outreach Chair, and I have the utmost faith that she will do an incredible job. Not only does she plan on keeping many of our annual Outreach events, but she plans on introducing her own new events to the calendar, which we can be sure to look forward to.

Thanks again for letting me be your Outreach Chair this past year, and I hope that you had a lovely summer!

"Each field of civil engineering was represented at this event [Research Info Session], which was able to provide the students with a large scope of all that civil engineering has to offer."



**RESEARCH INFO SESSION** Professor Brandenburg talking to the attendees about his research.



**SPRING STUDENT-PROFESSOR BBQ** Students enjoying amazing tacos at the BBQ.

In the final quarter of the 2015-2016 year, we participated in a couple sports. Both our Men's Independent Softball team and our co-rec Kickball team did well and made it far into the playoffs! Our men's softball team made it to the semi-finals and played well but were ultimately bested by the team that won the whole thing. In kickball, we lost a nail biter by one run in the round of 16. Last but not least, thank you to our captains at PSWC who helped us make an amazing show and winning 1st in volleyball, 1st in ultimate frisbee, 3rd in basketball, 3rd in KanJam, and 1st in the mystery event! Our volleyball captains: Kylie Williams, Kevin Nguyen, Michael Fletcher. Our ultimate frisbee captain Francisco Mier y Teran. Our basketball captain: Zach McFann. Our KanJam captain: Leighton Paradis. Without your guidance, we would've never done as well as we did!

Our "Athlete of the Quarter" is Karan Patel! Honorable mentions go to Kamal Deep Sheokand, Ryan Worley, and Damian Gutierrez. I would like to thank everybody for a great year as your Athletics Director! Unfortunately we did not win a shirt but I have absolute faith that Bryan Hong, your new Athletics Director, will win us a shirt this upcoming year!



**MATT BURKE** 



## **ULTIMATE FRISBEE CAPTAIN AT PSWC**

Francisco Mier y Teran, Ultimate Frisbee captain, in an exciting sequence of play.

This Spring we had our second on campus laser tag event to start the quarter. About twenty members gathered at the tennis courts to have a couple games of competitive fun. We also hosted our annual Spring Bonfire at Dockweiler State Beach. We played Frisbee, volleyball, and soccer before roasting hot dogs and making s'mores. Members also enjoyed burning the structure, which is an ASCE tradition. Finally, sport's fans gathered at Angels Stadium to watch a baseball game near the end of the quarter. Next year we will continue the traditional socials as well as introduce some new on and off-campus events. Maxwell Armenta will be the new social chair and will do a great job taking feedback from members about what socials they want to see and incorporate his own innovative ideas.

## SOCIAL KRISTINA CARTER & KYLIE WILLIAMS

## **ENTIRE ASCE at UCLA TEAM**

Whole team that attended PSWC after winning the 3rd place Basketball match.



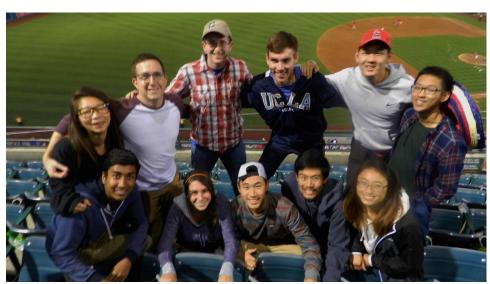
## ANNUAL BONFIRE AT DOCKWEILER STATE BEACH

Our members having a fun time with marshmallows and old Seismic Design structures.



## **BASEBALL GAME**

An amazing night at Angels Stadium along with great fireworks.



## **MENTORSHIP**

## **RYAN WORLEY**

On June 3<sup>rd</sup>, 2016, the new ASCE family system began with the ASCE Family Reveal Event. Here, all of the new ASCE Families and Lineages were unveiled, and can be seen below. For those of you that are not quite sure what the ASCE mentorship family is, here is a quick guide for you!

The ASCE family system consists of three different parts. Here they are below:

A Lineage System (Individual Mentors): Everyone who signs up will be eligible to be part of mentorship lineage. Each lineage will be made up of 4-6 students and will include 1st, 2nd, 3rd, and 4th year students. This is done to bring students of different ages together so that more experienced students can advise younger ones!

**Families:** Several mentorship lineages will be grouped together to form an ASCE family! You can think of your ASCE family as your team. Families will hold dinners and social events, and will be run by "Family Leaders." Families will also compete together in mentorship events, which are mentioned below.

Mentorship Events: ASCE will hold various mentorship and family events throughout each quarter! These will come in the form of competitions and socials, made for the sole purpose of bringing families and individuals closer together. Prizes will be given to the winners of these competitions! :) All families and members are allowed to participate in these events, making them inclusive to everyone in ASCE.

If you have not already, please sign up for the ASCE Mentorship Family! Look for the link on Facebook, or contact me directly at <a href="mailto:reworley1592@gmail.com">reworley1592@gmail.com</a>. The ASCE family is one of a kind, and has made a big school like UCLA feel a heck of a lot smaller. Sign up with ASCE Mentorship, and I guarantee you will have a plethora of fun!



ASCE FAMILY REVEAL EVENT Members enjoying amazing dinner with their respective families.

# PACIFIC SOUTHWEST CONFERENCE 2016



## **CAYLA WHITESIDE**

The Pacific Southwest Conference is the annual regional competition where most of our projects compete against other schools from around the region. Some of our projects can even go on to nationals depending on their finishes at conference. Conference is also a place where members can participate in a variety of other events and create new memories and friendships with other students and other schools. This year the Pacific Southwest Conference was held at CSU Long Beach during the weekend of 1st week of Spring Quarter. We had 93 students in attendance, a record number for UCLA! The conference was full of great fun and memories. Here is a brief recap of what went on at PSWC 2016...

On Thursday, the first day of the conference, students started arriving throughout the morning. The Concrete Canoe and Steel Bridge Displays were set up for judging all morning. The Ultimate Frisbee team competed throughout the day, and eventually won the competition! The Environmental Design Team had their competition, where they also took the first place. The Surveying, Scavenger Hunt, Quiz Bowl, and Canoe Presentations also had their competitions take place on Thursday. On Friday, all events happened near the Marina, where the canoe races were taking place throughout the day. The mystery event, Kan Jam, Tug of War, and Volleyball tournaments also occurred on Friday. Our Volleyball team took first place, while our Kan Jam team took 3rd. On Friday evening, we all had dinner together at Don the Beachcomber in Seal Beach. On Saturday, the last day of PSWC, we watched the Steel Bridge build, the GeoWall competition, the Technical Paper presentation, and our Basketball Team's games. Concrete Bowling, Transportation, and Impromptu also happened on Saturday. After all the competitions were over, we attended the Awards Banquet. To our joyous surprise, thanks to the extraordinary efforts of all our members, ASCE at UCLA took 1st place in the conference overall! This has not happened since 1994! All of our projects had notable finishes: Concrete Canoe took 1st place overall and 1st place in the design paper and presentation portion of the competition; Steel Bridge placed 4th; Environmental Design placed 1st. Our GeoWall and Concrete Bowling placed 5th while our Surveying team placed 6th. Our Volleyball and Ultimate Frisbee teams both took 1st place while our Basketball and Kan Jam teams each took 3<sup>rd</sup>. All the hard work and hours that our members put into their projects all year long truly paid off and we could not be prouder of our club as a whole. I can not wait to see what we accomplish next year!

Next year's Conference Coordinator will be Monica Corbin. Monica was the Community Service Chair this past year, so she already has lots of experience with arranging events and making sure they run smoothly. I have the utmost confidence that she will do a stellar job next year! PSWC 2017 will take place during the 1<sup>st</sup> weekend of Spring Quarter again, this time at UC Irvine. Our projects are already starting to prep for next year in the hopes of achieving even more success than we had this year. Hope to see you at PSWC '17!













## BASF The Chemical Company





"The result was a 2nd-place overall national finish by a large margin, UCLA's best finish in the history of the project... so far."









## **CONCRETE CANOE**

## **NATE DE ROPP**

This was a watershed year for the UCLA Concrete Canoe team, culminating in one of the best performances of our 26-year history. The team competed first at the regional level, attending the Pacific Southwest Conference with the rest of ASCE in early April. We participated in product display, presentations, and races the first two days, with an awards ceremony the third night. After placing 3<sup>rd</sup> in races, 2<sup>nd</sup> in final product, and 1<sup>st</sup> in both oral presentation and design paper, it was announced to the jubilant crowd that UCLA Concrete Canoe had won the competition overall. This was the first time in 11 years for us to take 1<sup>st</sup> regionally, and it also helped edge ASCE at UCLA to 1st place in the overall PSWC competition.

This accomplishment qualified us for a berth in the National Concrete Canoe Competition at the University of Texas, Tyler. We spent the rest of Spring Quarter intensely preparing. After two months of revamping the display stand, recasting the cutaway, re-editing the design paper, and reworking our paddling technique, we were ready for nationals. This year we fundraised enough to send 24 team members, three times as many as last year -- thank you to those who donated; it would not have been possible without you!

After finishing finals, three of our senior members departed for Texas with the canoe in a rental truck, the rest of the team following two days later by plane. Along the way, our drivers paid forward Cal's past generosity by picking up and transporting NYU's canoe. Once in Tyler, events proceeded much like regionals; the first day hosted displays of expertly crafted canoes emulating everything from X-wings to barbecues. The second day saw UCLA excel again in oral presentations as Max Armenta, Kevin Adamson, and Abby Gunning wowed judges with their knowledge of concrete chemistry. But canoers and spectators alike looked forward most to day three: race day. One by one, teams slid their canoes into the warm waters of Lake Tyler and took on an exceptionally large endurance course. UCLA women grabbed 5<sup>th</sup> and our men took 6<sup>th</sup> in this backbreaking contest. Next were sprint races, where UCLA men battled to 7<sup>th</sup> in a pair of closely contested heats. Our women paddled extraordinarily well, flying to 3<sup>rd</sup> place in the grand finals. Our coed team did well too, finishing 7<sup>th</sup> after after a near collision and a broken paddle had disqualified them from the past two attempts.

Awards were presented that night. Thanks to innovative mix design, casting techniques, aesthetic work, and paddling practices, UCLA placed in the top 6 of every category, including  $2^{nd}$  in design report and  $1^{st}$  in final product. The result was a  $2^{nd}$  place overall national finish by a large margin, UCLA's best finish in the history of the project... so far.

We look to maintain our legacy at nationals next year in Colorado, and there is nobody better for the job than next year's leadership: project managers Nate de Ropp and Amberly Bark and project directors Ada Chang, Yash Kansal, Briana Mercuri, Johnny Schmidt, Mahsa Sheykhsoltan, David Thi, Josh Widjaja, Adam Wong and Heather Wong. As all of them will be seasoned concrete canoe veterans after their dedicated involvement this year, they will use their expertise to focus on innovations and bringing the project to an even higher level than before. Work has already begun over summer, and we are excited for what next year has in store!



## WAYNE SHEN

## MANUEL & MARTHA ARMENTA





**CONCRETE CANOE TEAM AT NATIONALS** ASCE at UCLA's Concrete Canoe team after finishing 2nd place overall.



ASCE at UCLA'S CO-ED SPRINT TEAM Concrete Canoe's co-ed paddling team competing in their sprint race.



## LYNDA ARMENTA

certified public accountant





## **CONCRETE SPORTS**

EAA

## **CHRISTIAN TRAN**

Concrete Sports is the oldest and most prestigious project with ASCE at UCLA. Based on mix design of a concrete bowling ball and athleticism, this project is one of the more unique undertakings within ASCE. Jumping into the annual Pacific Southwest Conference, the concrete sports team arrived with a brand new mix from previous years, effectively shedding off 30% of the weight and having overall a much more aesthetically pleasing ball. With the artistic talent of Austin Wong, the ball's theme Powerbowl caught the eyes of many at the competition. The final roster for the Pacific Southwest Conference team (Ariel Siegel, Francis Paras, Ryan Worley, Monica Corbin, and Christian Tran) each bowled one frame at competition, with Francis managing to score a strike. With this, the team ended with a 5<sup>th</sup> place finish out of 18 teams, a good finish but leaving room for improvement. For next year, the incoming project manager will be Francis Paras, not because of his stellar PSWC performance, but because of his dedicated involvement in the project the entire year. Along him will be Adam Wong, an incoming sophomore who shows a lot of potential. It can be anticipated for next year that, with the new developed mix, the bowling portion of the competition from UCLA will greatly improve under Francis' leadership and athleticism.

## ENVIRONMENTAL DESIGN EAA

JONATHAN WIGMAN



**ENVIRONMENTAL DESIGN PRESENTATION TEAM** The team after giving their environmental design project presentation.

This past spring quarter, our project went to conference with our small-scale water treatment system. We were tasked with treating greywater (sink and shower runoff containing surfactants and organic matter). The final system chosen was a column of sand followed by various gradations of activated carbon and other intermittent filter media

This design came after many workdays filled with testing of different media types, carefully creating a low cost design, and many long full scale system tests wherein we fixed small portions of the final system. The end result combined with our excellent presentation team won us first place at PSWC!

Next year looks just as great if not better with the new project manager, Joseph Wildman at the helm. His dedication to the project this year as well as his strong interest in water treatment and water resources engineering will continue to bring the project forward. He has already planned and hosted a field trip to the Hyperion water treatment plant following the Pacific Southwest Conference, and we look forward to the continued growth and success of Environmental Design and all its project members next year under his leadership.

## **GEOWALL**







## **ARIELLE SANGHVI**

GeoWall is UCLA's undergraduate geotechnical engineering project that competes in a national and regional competition each year. The goal is to design and build a small- scale mechanically stabilized earth retaining wall using poster paper, construction paper, and tape—this wall must hold up 500 pounds of soil and must be created and tested at the competition within a time limit. Our design must use the least amount of material necessary to reinforce the design loads, analogous to creating the most cost-effective and efficient design if it were applied to a real-life situation.

This year's GeoWall team was full of overcoming challenges, creating great memories, and expanding the UCLA team. In the beginning of spring quarter, we built our wall and structural load frame under the sun at the regional Pacific Southwest Conference (PSWC) at CSU Long Beach, placing 5<sup>th</sup> out of 18 schools. It was an incredible competition where we were able to exercise our teamwork skills as well as the way we adapt to unexpected situations.

Since then, the UCLA GeoWall team has been working on project leadership transitioning for the 2016-2017 team and recapping what went well and what we can improve on for next year. We also hosted the first ever "Dirt Course," which was a two-hour overview of the basic concepts covered in CEE 120: Principles of Soil Mechanics, taught by our graduate advisor Sean Ahdi. This course had a great turnout of particularly second-year Civil Engineering students—we may host another session next year.

This great learning experience will be continued next year at the national GeoWall competition in Orlando, Florida!

GeoWall 2016-2017 Leadership:

Co-Project Managers: Chris Nicas, Arielle Sanghvi Project Directors: Trini Inouye, Doug Chambliss



GEOWALL TEAM AT PSWC ASCE at UCLA's GeoWall team posing for a picture after completing their competition.



## FAA

"Being the only school with zero violations, our team was extremely proud of our construction skills and quality control."



SEISMIC DESIGN FINAL STRUCTURE

## **SEISMIC DESIGN**

## **VICTORIA LAM**

Based on San Francisco's unique blend of different cultures and people, our final structure utilizes a newly developed method to fabricate curved façade pieces, allowing different shapes of floor plans to come together forming *Mosaic*. Besides from the aesthetics, we also made sure the design was structurally sound through the use of computer simulation and testing prototypes. After testing an almost identical structural system, we were confident in our design. So off to San Francisco we drove!

Eager and excited to see what other schools had designed and built, the first day of competition comprised mostly of networking with students from other teams and with the professionals attending EERI's Annual Meeting, which was held in conjunction with the competition. With a smaller venue this year, the participants were handpicked by the judges, with a limited amount of spots for returning schools and a certain amount reserved for new schools. Because of this, the range of structures varied greatly, some were extremely innovative while others were exact replicas of last year's winners. Talking to other teams about their design and construction process brought up new procedures that could be implemented in the future and also helped us realize what to avoid. Afterwards, we checked in our structure for the preliminary checks after making sure no damages were done to the structure en route.

The next day were technical presentations. Given only seven minutes to talk about the whole architectural concept, structural innovation, construction process, and analysis of the structure, it was definitely a time crunch. With numerous mock presentations the night before, we were fully prepared to give the brief yet thorough presentation. We were even able to answer all of the judges' questions concisely and accurately, placing third overall for communication.

Judges went around individually to check the structures for violations and made sure it was compliant to the rules. Being the only school with zero violations, our team was extremely proud of our construction skills and quality control. But shortly after, the judges called our team back to inform us that another team had brought up an issue regarding a lot of the structures...

The most nerve-wracking day throughout the competition was of course the shaking day. Although we had been fully confident that our design, we had wrongly assumed and misinterpreted the location at which the weights would be loaded onto the structure. The double story restaurant at mid-structure meant that all the upper weights had to be loaded 2 inches above our designed load-bearing floors. As a result, since the structure was loaded on floors that were not sufficient to sustain the weights, all the weights fell through during the last ground motion. Despite the fact that we all knew fully well that the structure would not be able to hold up with the new weight configuration, we still went to shaking day with our spirits high and cheering other schools on. The presence we brought and the way we represented UCLA are something I am super proud of our team for.

Aside from the mishap, our team still did extremely well in other categories. While we paid a high price for a valuable lesson this year, I truly believe next year's leaders, Eric Roberts and Justine Gee as Project Manager and Assistant Project Manager respectively, would be able to bring the project to new heights!

## SEISMIC OUTREACH







## **AUSTIN WONG**

This year was full of expansions, improvements and growth. We saw improvements in execution of our Spring Finale Event held on May 27<sup>th</sup> in UCLA's Pauley Pavilion. The day was full of excitement and energy as 400 sixth grade students from our neighbors at Lincoln Middle School made their way to our campus. There were chants of pride from three different teams led by our vibrant ASCE volunteers. From the moment the students stepped off the bus, to the moment competition winners were announced, everybody's energy was up and constant. Many students took the time to personally tell us 'I am going to become an engineer'. It was great to see such genuine excitement for science and engineering from these young students!

We implemented many lessons learned from this past fall's partner, Paul Revere Middle School. One improvement was dividing the group into color teams to create a more fun and competitive atmosphere. We also used walkie-talkies between station leaders to streamline communication and provide timely status reports of the event. We hosted the largest number of students Seismic Outreach has had since our inception three years ago, doubling the count to 400. We hope to keep expanding each year in order to reach as many students as possible in the neighboring cities of Los Angeles. This is made possible by the constant support of our incredible sponsors. We want to thank all our sponsors, teachers and volunteers for an incredible year and cannot wait to continue Seismic Outreach in the years to come.

Seismic Outreach 2016-17 Project Manager: Alyson Kim

## **SURVEYING**

FAA

## **MEGAN NAZARENO**

This past year, Surveying has experienced several improvements, and successes: the addition of surveyor-led workshops, increased membership, better competition preparation, and a 5<sup>th</sup> place finish at PSWC!

In Long Beach in March, our conference team consisting of Cecilia Vong, Josh Manabat, Glynn Baca, and myself participated in three timed surveying events. Having spent weeks coordinating with our practitioner adviser and running through practice courses over and over again, our goal was to improve from last year's standing. Our efforts paid off, as we were able to place 6<sup>th</sup> overall (despite some difficulties locating one pesky point in the field...)!

After PSWC, our project members had time to relax, and we spent Spring Quarter preparing next year's leadership and holding workshops and socials. At the end of May, we hosted a workshop open to all ASCE members, where they were able to experience a simplified version of the conference events. Not to mention, this event was a great opportunity for next year's project manager Cecilia Vong and project director Glynn Baca to experience planning and leading surveying workdays! The last Surveying event of the year was a tie-dye social, where a few of us gathered and learned the importance of reading directions carefully.

Next year, Surveying is in more than capable hands with Cecilia and Glynn as officers. The project will undoubtedly continue to improve, especially in our competition preparation. We look forward to working more with our advisers to increase our understanding of the practice and to welcome even more members into our project.



**SEISMIC OUTREACH FINALE DAY** Shake Table Test of structures made by kids from Lincoln Middle School



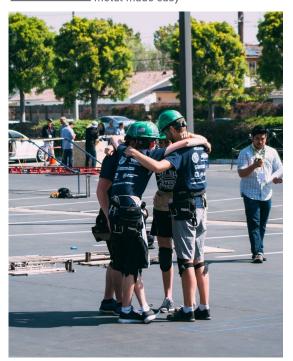
**SURVEYING TEAM** ASCE at UCLA's Surveying Team competing at PSWC

## STEEL BRIDGE

**KYLE EVANS** 



EAA



**STEEL BRIDGE TEAM** A team huddle before construction of the bridge

Over the span of a mighty imaginary river, and with rust-proof determination, the Steel Bridge team constructs a roughly twenty-foot long model structure out of the mightiest of materials. Each year certain standards change to generate challenges unique to the previous competitions, but the overall structure keeps a consistent pattern. The student-fabricated steel bridge is constructed from dimensionally limited pieces that can be put together and taken back apart. The final product is judged at competition based on meeting dimensional requirements, construction speed, projected cost for the full scale structure, and degree of deformation under a distributed 2,400 lb load. The guidelines for the 2016-17 competition have not yet been released, but UCLA's Steel Bridge team had a successful year from which to build upon.

4<sup>th</sup> place was taken this year at the PSWC competition in Long Beach along with several other milestones for the team's progression. This was the first in several years that UCLA's bridge successfully passed the loading portion of the competition, and although the construction portion was not the team's best run, great strides have been made in total bridge pieces and construction speed. The team successfully implemented two new fabrication techniques, a tube-in-tube arch and partially two dimensional space truss, opening up next year's builders to new skills and possibilities.

Next year's team will be led by Project Manager Kyle Evans and Assistant Project Manager Allison Woodworth with Directors Cecilia Vong, Parth Prashar, Nanshan Li, and Joshua Fidelis. This summer, we will be keeping up our design and modeling skills introduced in the Spring quarter design workshop with a few projects so we will be ready to hammer out a winning design. The bridge model will be refined during Fall quarter and the team will also be rolling out a new intro project to introduce new members to the machining skills needed to put together a fabulous new bridge.

On May 20<sup>th</sup>, 2016, 130 ASCE members, faculty, and alumni gathered in the faculty center for ASCE's End of Year Banquet. Students bonded over a three-course meal catered by UCLA as we ended ASCE's year in style. This joyous event promoted celebration of the hard work and amazing accomplishments ASCE had this year, including our first place finish at conference and in Concrete Canoe. We were even honored to have Jay Higgins, an ASCE Regional Leader, come and award us the Region 9 Distinguished Chapter Award, crowning us the best chapter in California.

ASCE banquet culminated with a variety of awards. Richard T. Shimano Award is given to a graduating member of ASCE who has shown service, dedication, and leadership to the ASCE. This year, it was awarded to Alicia Pedneault. Her unwavering dedication and service to the club during her tenure as Project Excecutive and Steel Bridge PM is exemplary, and she has absolutely left a lasting legacy here at UCLA. Additionally, this year, we awarded the first ever Rising Stars Scholarship to two underclassmen who showed exceptional promise within ASCE, Eric Roberts and Kasey Murukami. Their dedication to ASCE at such a young age is outstanding, and I know ASCE will benefit from their presence immensely in the future.

All in all, End of the Year Banquet allowed the ASCE family to come together to end a spectacular year. I hope that you all enjoyed attending banquet as much as I enjoyed putting it on!

## END OF YEAR BANQUET 2016

**RYAN WORLEY** 



ASCE at UCLA AWARDS BANQUET Core Officers of ASCE at UCLA receiving Region 9 Distinguished Chapter Award from Jay Higgins.

## **ASCE GRADS**

## **CONGRATULATIONS CLASS OF 2016!**



## **ALEJANDRA VERA**

I am graduating from UCLA with a Bachelor's in Biology and a minor in environmental engineering. I joined ASCE my junior year after being convinced by a friend. At first, I was not sure how someone with no background in engineering was going to fit in a club like this. To my surprise, I was encountered by a group of incredibly friendly individuals and that made all the difference. I became mostly involved with Environmental Design and I found the topic of water treatment incredibly fascinating, which led me to enroll in the minor for environmental engineering. My senior year I became one of the directors for Environmental Design and became more involved in other parts of ASCE as well. This summer I will be working in Professor Mel Suffet's lab, who is working for CH2M Hill and Orange County Sanitation to test out odor scrubbers designed for the removal of unpleasant odors from the air coming out of the OC water treatment plant. Next school year, I will be attending UCLA once more and working on my Master's in Environmental Engineering and Water Resources.

### **KEVIN ADAMSON**

So I originally transferred to UCLA from Saddleback College in Orange County (GO GAUCHOS). Once I got to UCLA, I immediately joined ASCE, which turned out to be a great idea. Not only is ASCE a great professional organization, I also made some super special awesome friends through the club. Despite never being an "official" officer (0 for 3), I was able to get involved with a variety of projects, mainly Concrete Canoe. Projects are the greatest part of ASCE as they allow you to apply problem solving to real world scenarios PLUS social activity/friendship is cool too. PSWC is the best event of the year and I would highly recommend it to everyone. For the future, I will be returning to UCLA in the fall to pursue a master's degree. Eventually I plan to become a practicing structural engineer who teaches on the side whilst wearing strictly coatigans with collared shirts.





### **VICTORIA LAM**

My college experience would not have been the same without ASCE. Starting off as an extremely shy freshman, I joined the Seismic Design team just based on the fact that they got to travel to cool places for competition. But after attending a few workdays, I completely fell in love with the project. The precision, the dedication, and the passion everyone had towards it was something I have never seen! I continued to stay involved and am really glad I did as this was where I met some of my closest friends, who brought me out to see what else ASCE had to offer. Slowly but surely I started to become less and less socially awkward. During my senior year I even ended up leading the project I first joined, which is something I still can not believe. Although these past 4 years have been a lot of work, I still enjoyed and will miss every aspect of it deeply. Thanks for the memories ASCE <3!

## **ANDREW KAO**

I recently just graduated from UCLA with a M.S. emphasized in Structural and Earthquake Engineering. I also received my B.S. in Civil and Environmental Engineering in 2015. My ASCE at UCLA experience focused on Steel Bridge. The Steel Bridge project was a unique one were you develop an unbreakable bond with your team through 20 hour work weeks, spring break build practices and plenty of sweat, blood and tears. All of the experiences, from the mundane endless grinding to the adrenaline fueled excitement of build, have defined me and equipped me better for all of my future endeavors.

Joining ASCE has been the best choice I made at UCLA. Here I met some of the most passionate and intelligent people I know. It has been a place of where I have discovered some of my most valued friendships. It also has been a place where I have had great personal development and growth.

I plan on enjoying the summer break through traveling to a variety of places including Glacier National Park, USA, Banff National Park, Canada, and Jasper National Park, Canada. Beyond that, I will be trying to enjoy the sun by swimming, hanging out and just relaxing. Once summer is over, I will start a full time position at KPFF.

I look forward to visiting ASCE throughout my career and seeing how much the team and family have grown!

## SUMMER ACTIVITIES

## **ARIEL SIEGEL**

This past summer I interned at Amec Foster Wheeler in the Los Angeles office. Working in the geotechnical sector, I gained valuable insight into the geotechnical industry through involvement in the office, soils testing laboratory and field. My co-workers and mentors in the office only added to my experience as they helped expand on my foundation in the geotechnical engineering. Of course, the job was far from boring with our professor, Marty Hudson, in the office. Geotechnical Engineering Rocks!

### KASEY MURAKAMI

Tech Camp provides high school students the opportunity to learn more about engineering and the chance to work on hands-on projects related to some of the engineering majors. Bryan and I were the Tech Camp mentors for the Seismic Design team. We gave lessons on concrete, structures and civil engineering in general. The students on our team mixed and tested concrete cylinders, as well as constructed and tested 2 foot tall balsa wood structures in a simulated Seismic Design competition, similar to the one ASCE participates in every year.



## **RUBY KALRA**

Summer kicked off for me after I returned from Concrete Canoe Nationals in Texas, which our team took off for during finals week in June. I spent most of the summer hanging out in Santa Monica with Morley Builders, creating 3-D models of construction projects with the BIM team. I also worked with next year's concrete canoe team on campus throughout summer as we planned ahead and finalized our theme, mix, and hull design.

## **RYAN WORLEY**

This summer, I interned at Holmes-Culley, a structural engineering firm based out of San Francisco. This was a great learning experience for me, as I finally got to apply classroom material to designing real structures that will be built! Apart from work, I took trips to Chicago, New York, and Tahoe this summer with my family and friends. I also took trips to LA to visit my good ASCE friends who stayed around campus!



## **UPCOMING EVENTS**

**ENORMOUS ACTIVITIES FAIR** 9/20/16, Royce Quad & Wilson Plaza **ENGINEERING WELCOME DAY** 9/21/16, Ackerman Grand Ballroom

ASCE KICKOFF EVENTS 9/30/16, Engineering 5 Patio

OPEN HOUSE 10/5/16, Boelter Penthouse

FALL ASCE GENERAL MEETING 10/12/16, TBA

FALL CEE CAREER FAIR 10/27/16, Ackerman Grand Ballroom

FOR DETAILS ON ALL THE EVENTS, VISIT ASCEBRUINS.ORG/CALENDAR

