

ASCE BRUIN

FEATURING

Outstanding Student
Chapter of the Year

Going Beyond ASCE

PSWC 2015

New Projects

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Dance



Blake Wyatt

Blake has been dancing since he was very young. He used to watch his older sister take dance classes and it looked like fun, so he joined too. He grew up doing mainly tap and hip hop. He is now a member of NSU Modern, one of the hip hop teams here at

UCLA. Dance has always been his favorite passion and hobby. It allows him to stay active, creative, and social all at the same time. He says it is an activity that can never truly be mastered, because there is always room for improvement and new styles to explore.

Being on a dance team this year has given him an entire new community at UCLA. He has met people from a wide array of majors and backgrounds who all come together because they all share the same passion. He remarks, the long hours of rehearsal and cleaning sets do get tiring, but it is all worth it when the final product is put on stage at competition. They are attending three competitions during spring quarter, one of which is Battle Royal, a competition between all UCLA hip hop teams. He definitely recommends that everyone attend this May!

GOING BEYOND ASCE

In the following section, we will spotlight certain individuals from ASCE at UCLA who go beyond their duties in ASCE by participating in other activities. Their drive and dedication to not only ASCE at UCLA but in their respective outside activities shows how diverse the members of ASCE at UCLA are.

Triathlon



Allie Light

Allie swam competitively through middle and high school, but decided to focus on academics at UCLA where she would not be fast enough unlike at smaller Division 3 schools. So she decided to ditch the UCLA's masters swim team and started riding the triathlon team coach's extra road bike and easing herself into running. She is an extremely competitive person who doesn't ever like to take the easy route, hence her reason for being involved in a sport where one races for over 1 to 2 hours and master three different sports. Her biggest challenge came during her first year and a half at UCLA. She missed training, racing, and most

of all being part of a team. She even contemplated transferring to a smaller school where she could swim competitively, until she joined the triathlon team. Now, she loves how she can train on a daily basis with such talented athletes. She is very excited to be at the forefront of the developing sport and be involved in setting the precedent for future triathletes.



Matt Stewart

Matt had a background in running, cycling and swimming while growing up so combining the three sports into one seemed very intriguing. After spending a sedentary freshman year with the infamous *freshman 15*, his competitive nature reared its head and he realized that he needed a fun diversion to keep him happy in between long study sessions. He discovered that the triathlon team was full of interesting and hard-working individuals. He loves going for long bike rides with teammates on Highway 1 or running in the mountains north of UCLA. Matt also enjoys

putting all three sports together and driving to races throughout California (San Diego, Irvine, San Luis Obispo, and Stanford) to compete against collegiate athletes. Last year at the National Championships in Tucson, AZ, their team placed second to secure their best finish in the 12 year history of their team. He loves triathlon because it is a great way to stay in shape with awesome people.

As for funny stories, he says "I'm rather terrible at swimming in open water because I can't manage to swim in a straight line. This has led to some uncomfortable situations including finding myself several meters away from everyone in a jungle of seaweed. Another time, one swimmer and I had separated ourselves from everyone else, but my wild swimming habits led me to swim directly on top of him causing him to flip over. He was not amused!"



PRESIDENT

Letter from the President

By Maxwell Armenta

Dear Alumni, Faculty, Students and Sponsors,

It is my great pleasure to present to you the 2015 Spring Edition of the ASCE Bruin. The American Society of Civil Engineers at the University of California, Los Angeles (ASCE at UCLA) has been very busy over this past quarter. We have a lot to share, and a lot to be proud of. This past winter, ASCE at UCLA hosted a very successful Winter C&EE Career Fair, competed in the ASC 67 Sparks, Nevada Construction Competition, placed 6th in the National GeoWall Competition, and earned the title of 2015 ASCE LA Section Outstanding Student Chapter of the Year.

The title of Outstanding Student Chapter is given every year by the ASCE Metropolitan Los Angeles Branch - Younger Members Forum. The honor was first awarded in 1969, and UCLA has earned the title a total of five times (including 2015). The last time UCLA took home the honor of Outstanding Student Chapter was in 2007. This award displays the high level of involvement and tremendous work that our members have been up to over this past year; however this past quarter alone is a good representation of the high level of dedication and passion shown by ASCE's members.

This past quarter started out with the ASCE Winter General Meeting. Over 80 people were in attendance for the event. This enabled us to recruit more members in the winter, pushing us to 220 student members (A record high for ASCE at UCLA)! Next, the Annual ASCE Ski Trip to Big Bear took place from January 16th-19th. The three day trip allowed for members to bond and have fun before another hard quarter began. The quarter then began to pick up pace. All project managers and their teams worked in full gear to complete their work before their respective deadlines. We attended the Associated Schools of Construction (ASC 67) Competition in Sparks, Nevada at the beginning of February. All UCLA teams came out to compete, and we had a noticeable increase in performance from the previous year (Last year was our first year competing in the competition). Additionally, during this past quarter, the GeoWall Team placed 6th place at the National Geo-Congress in San Antonio, Texas (5 places higher than the previous year). The Seismic Design Team will be competing in Boston from March 30th – April 3rd. We wish them the best of luck, and expect another top finish (which will be well deserved). Meanwhile, all other projects will be getting ready to embark for Arizona to compete in the Pacific South West Conference in Tucson, Arizona (UofA). The conference will take place from April 9th-11th.

As I conclude this introduction, I would like to invite you to follow ASCE at UCLA via Twitter/Facebook/Instagram (@asce_bruins). Here you will be able to stay connected with our student chapter and keep up-to-date on all our activities. I would also like to thank all our sponsors, the UCLA Civil and Environmental Engineering Department, and our wonderful advisors for their continuous support. We wouldn't be able to do all that we do without their generosity.

Like always, please don't hesitate to reach out if you have any questions or comments. All ASCE at UCLA contact information can be found online at www.ascebruins.org, or you may reach me directly at max.are.menta@gmail.com.

Sincerely,

Maxwell Armenta, President
ASCE at UCLA, 2014-2015



ASCE at UCLA receives the highly prestigious LA YMF Outstanding Student Chapter of the Year Award.

PSWC 2015

The biggest event for ASCE at UCLA is PSWC. It is the culmination of months of hard work for many projects.

By Kevin Nguyen

The Pacific South West Conference (PSWC) is an annually held event that attracts all of the top engineering students who compete with each other in their specific engineering projects prepared from various universities.

ASCE at UCLA's most anticipated event of the year is PSWC. Engineering students from our university are ambitious and passionate about the projects they restlessly work on. Through this experience, project team members are not only able to gain lasting friendships, but they also attain the skills necessary to be successful in their field of study.

Fifty-eight of our most driven civil and environmental engineering (C&EE) students will travel to the University of Arizona (U of A) where the PSWC is to be held. Utilizing their knowledge gained from our C&EE program, the students will compete and showcase our department's strength in the following projects: Concrete Bowling, Concrete Canoe, Environmental Design, Geotechnical Wall, Steel Bridge, Surveying, Doghouse and Transportation.

Attendees will be carpooling and flying to PSWC. While at U of A, ASCE at UCLA conference participants will room at the Doubletree Hotel by Hilton for four days from April 8th to April 12th. From here, participants will carpool to and from various sites where events are being held.

Go ASCE Bruins!



Kyle Tomita, Christian Tran, Megan Nazareno, and Melanie Lim compete in Concrete Canoe.



Maxwell Armenta guards Sam Cummings in Ultimate Frisbee at PSWC 2014.



ASCE at UCLA group photo at the Banquet at PSWC 2014 in San Diego, CA.

CAREER FAIR

This year, the Winter Career Fair strongly built upon the Fall Career Fair by having over 29 companies that represented a variety of sections of civil engineering.

By Vatsal Gupta

The UCLA CEE Career Fairs are hosted twice a year by ASCE at UCLA. These Career Fairs are catered especially to civil engineering majors and have a turn out of over 300 undergraduate, graduate, and post-graduate students. The tone is very professional and the talent is top-notch.

The Winter 2015 Fair had 29 companies and over 150 undergraduate, graduate and PhD students in attendance. We also welcomed 5 companies into the UCLA-CEE Partners program. The immense success of this Fair was only possible because of the due diligence of the ASCE at UCLA Industry Liaison Interns and the Officer Board. Next year, we aim to break the elusive 30-company barrier and achieve better and long-lasting relationships with the recently-welcomed companies.



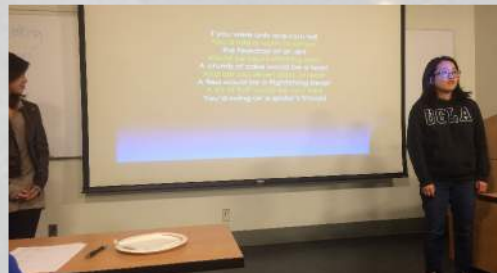
Winter career fair in the Ackerman Grand Ballroom

SPEAKER COORDINATOR

Throughout the quarter, ASCE at UCLA invited companies representing all aspects of civil engineering to speak about their company, the industry, and the types of projects they work on.

By Matt Stewart

ASCE at UCLA followed up a professional event packed fall quarter with even more info sessions and professional developments in the winter quarter. Our members participated in an informative public speaking workshop hosted by Brad Fry where students were encouraged to test their nerves by speaking in front of the group. In another workshop, Vatsal Gupta, Matt Stewart, and Nicole Shafer discussed how to succeed at a career fair. Both workshops attracted a large audience of ASCE members working to improve their professional skills. Additionally, ASCE at UCLA invited several companies representing all aspects of civil engineering to speak about their company, their industry, and the types of projects they work on. Representing the private sector, we heard from W.E. O'Neil, Whiting-Turner, W.L. Butler, ENGEO, Pankow, and Accenture. The United States Navy spoke about their Civil Engineering Corps., and the Los Angeles Bureau of Sanitation spoke about job opportunities for civil engineers. Company info sessions serve as a valuable resource for younger students to learn about the various careers a civil engineering degree can lead to and are an opportunity for all students to network with company representatives. Coming up in spring quarter, ASCE at UCLA is looking forward to info sessions with Kennedy/Jenks Consultants, Webcor, and McCarthy. Additionally, representatives from California High Speed Rail will speak about their recent groundbreaking and the scope of the project.



Public Speaking Workshop with Brad Fry.

OUTREACH

In order to ensure that the alumni of ASCE at UCLA and current students stay connected, Outreach hosts events to establish opportunities for interaction between students and alumni.

By Allie Light

This winter, ASCE at UCLA reconnected with UCLA civil engineering alumni and professors at our alumni career panel-mock interview event and quarterly barbeque. ASCE's new career panel-mock interview event provided students with the chance to practice charming their way to a job offer. Students also got all their career questions answered by people who have been in their shoes but now have hindsight to help students avoid all their career blunders. Alumni from Walsh, Accenture, Krismar Construction, KPFF, and the Long Beach Water Department were all on the panel, which made for a great mixture of career experience.



Mock Interview/ Alumni Career Panel

Also, students, professors, and alumni enjoyed LA's early spring weather at Sunset Recreation and connected over some barbeque. With finals just around the quarter, the barbecue came just in time and gave students an opportunity to relax for an evening and shoot the breeze with their peers, professors and alumni.

COMMUNITY SERVICE

ASCE at UCLA is a diverse engineering club that takes part in a variety of events. The Community Service section ensures that we continue to give back to the community.

By Jon Wigman

ASCE at UCLA continued to be very active with community service this past winter quarter. At the start of the quarter we worked with the UCLA Blood and Platelet Center to host a blood drive and promoted donations by our members. Free movie tickets and snacks are always offered with every donation as students supply a majority of the blood for the area and local Ronald Reagan Medical Center. Some of our members participated as online and in person judges for the Future City competition in which cities of the future are designed by students for an annual competition. Later in the quarter, ASCE and CalGeo joined Heal the Bay in a large beach cleanup of Will Rogers State Beach. Volunteers had a blast, and there was plenty of sunshine for members to play some frisbee afterwards. YMF's Engineers Week kept ASCE at UCLA very busy later in the quarter as well. On Tuesday of Engineers Week, members participated in the Elementary Day with a hands on demonstration of structural engineering using gumdrops and toothpicks as building blocks. Our booth was definitely a favorite among the elementary students, so much so that we lent some of our supplies to other volunteer groups to help meet the demand. On Saturday of Engineers Week, volunteers from ASCE at UCLA rose bright and early to arrive at Union Station at 7AM to help setup and run the 21st annual Popsicle Stick Bridge Competition hosted by YMF wherein high school students brought popsicle stick bridges they designed, built, and wrote a technical paper on to be tested. One such bridge held 681 pounds before breaking! For the annual PSWC conference, we also began construction of a doghouse to be donated at Arizona to the Humane Society.



Beach Cleanup at Will Rogers State Beach with Heal the Bay

On the horizon for spring quarter is another run of ASCE at UCLA's very successful Seismic Outreach program and many more volunteer opportunities. We have done so much these past two quarters, and we expect to continue in the future.

MENTORSHIP

ASCE Mentorship continued where it left off in Fall Quarter with a mentorship event at Sky High. Group study events were also planned throughout the quarter.

By Blake Wyatt

Mentorship continued this winter quarter with the first off-campus mentorship event and a focus group study. The first event was a social event to Cosmic Sky High. Here, the attendees got to pretend to be a kid for an evening by jumping, flipping, playing dodgeball and Just Dance with their favorite civil friends. This event was very well received by those who went, so an off-campus event will likely be planned for spring quarter as well.

The other event held this quarter was a group study event during the height of finals season. This gave our students a quiet place to study, do homework, and tutor each other while enjoying refreshments provided by ASCE. This event took place during the day of the Superbowl, so after hours of studying, we took a study break while watching the Patriots and Seahawks battle it out.

This quarter was limited on the number of Mentorship events due to heavy time commitments of our projects. As our projects finish up after their respective competitions early spring quarter, mentorship will ramp back up. Next quarter, another off campus event, the Second-Annual Family Games, and a possible leadership talk are all events to look forward to. Points will be rewarded for winning the games and attending each event. At the end of the quarter, the family with the most points will be crowned the winner and be given a prize! I look forward to the final quarter of the school year and for what is to come in mentorship.



Members enjoy the trampolines at Sky High.

ATHLETICS

This quarter ASCE at UCLA participated in IM Basketball and IM Volleyball. Both teams wished for a better end result to their season but they have Spring Quarter to look forward to!

By Ryan Dudley

ASCE at UCLA's intramural co-ed volleyball team, Civil Disobedience, made a huge turnaround from this Fall Quarter, going from 0-4 in the Fall to 3-1 in the Winter regular season. The season came to an end in the first round of playoffs with a close loss in three games. Men's basketball, the Court Surveyors, opened the season with a huge win, and at one point in the second half had doubled the opposing team's number of points. The team struggled to find a win after that, largely due to roster issues, and finished the season at 1-3. In Spring Quarter, the defending Football champions, Kickin' Asphalt, will take the field and ASCE at UCLA will also participate in co-ed soccer, a sport that has been historically strong for the society.

Regular Season Record:

Basketball: 1-3

Volleyball: 3-1

SOCIAL

Adding to the well roundedness of the ASCE chapter at UCLA, our club boasts a very strong social atmosphere.

By Ariel Siegel

This past quarter, our chapter was able to share in annual traditions as well as create new socials. The socials strengthened interclub bonds and allowed for interaction with other ASCE chapters around the Los Angeles area. As a chapter, we traveled to Big Bear for our annual ski trip retreat, which included skiing, snowboarding, hiking, playing pool, and taking a much-needed break from school while we also held multiple on campus gatherings including a Valentine's Day celebration. In addition, our chapter partook in two joint socials with other local ASCE chapters which included a hike at Topanga State Park with CSULB and a beach bonfire at Dockweiler Beach with the USC and CSULB chapters. We hope to continue providing a social aspect to the ASCE chapter at UCLA next quarter through additional on campus events including an end of the year social, as well as additional joint events such as laser tag with CSUN.



ASCE members in front of the sunset at Dockweiler Beach.



Jon Wigman, Maxwell Armenta, and Blake Wyatt sit satisfied after their strenuous hike.

FIELD TRIP

The main purpose of these trips is to expose members of ASCE at UCLA to different fields within civil engineering.

By Abby Chung

This quarter, ASCE at UCLA hosted three field trips. John A. Martin, one of the largest privately-owned structural engineering companies in the US, gave students a tour of their downtown Los Angeles office and a presentation about the company. For students interested in pursuing a career in structural design, this trip was an excellent opportunity to get a sense of a major firm's office atmosphere.

The two other field trips this quarter were both to on-campus construction sites. At the new Luskin Conference Center, students were given a presentation and site tour by McCarthy Building Companies, the general contractor. The tour highlighted the different phases of construction, which were seen in the multiple floors of guest rooms. At the Saxon Suites residential complex on the hill, Icon West gave students a tour of the renovation and new construction on site. It was interesting to get a behind-the-scenes look at the construction going on around campus.



ASCE members at an office tour of John A. Martin & Associates Inc.

MEMBERSHIP

A Word from Membership Chair

By Ryan Worley

Greetings ASCE Members,

Thank you for being a part of the ASCE at UCLA for 2014-2015 academic year. I hope you have benefited from the plethora of professional and social opportunities that have been offered throughout the quarter.

As of this moment, we have 220 active members, and it is predicted that we will exceed the 230 member mark during the duration of spring quarter. These numbers exceed our membership count from last year by 10 percent, meaning that we will have an excellent chance in retaining our status as "Most Outstanding Large Engineering Club" for the second year running. Well done!

This past quarter, we've enjoyed massive turnouts at all of our events. We would like to thank you for attending our professional workshops like career fair and info sessions. Events such as these allow us to strengthen our ties with the corporate world. We also appreciate attendance at all of our social gatherings, specifically ski trip. This Big Bear retreat was a giant success as almost 50 ASCE members bonded through activities such as skiing, hiking, sledding, and watching football. Considering all of this, I feel it's safe to say we had a stellar last quarter.

As your membership chair, it is my goal to keep this momentum rolling into spring. This quarter, we look to finish off all our projects with a bang as Pacific Southwest Conference (PSWC) rapidly approaches. At this event, six of our projects will compete against colleges in our region (i.e. Cal Poly, USC). We like to look at this event as a place where we can assert our status as best ASCE chapter on the west coast! I hope everyone can find time to provide last minute contribution to projects to help our club achieve the PSWC first place finish we deserve. Additionally, spring quarter is host to a variety of social and community outreach events. Be on the lookout for events such as themed socials, the Family Olympic Games, and barbecues at Sunset! Community Outreach will also be boasting the Seismic Outreach Program, which works with 6th graders to teach them more about structural engineering. This program will host 250 students this quarter.

Finally, I would once again like to extend my thanks to everyone involved in ASCE. You are the reason why ASCE at UCLA is so prosperous right now. Your membership is important to us, so please feel free to contact me with anything I can do to make the experience more enjoyable. Keep up the good work, and I look forward to seeing you at events this quarter!

Best Regards,



Ryan Worley, Membership Chair
ASCE at UCLA 2014-2015



ASCE inscribed in the sand.



Volunteers at the LAYMF Popsicle Bridge Building Competition.



Ski Retreat at Big Bear, California.



Student Professor BBQ

This past quarter the ASC 67 team competed in Sparks, Nevada and made significant improvements from last year.

By Norman Chak

Our ASC67 team had a great winter quarter involving many workdays to adequately prepare for the competition. With all of this preparation, all three of our teams – Design Build, Heavy Civil, and Mixed Use, were ready to head out to Sparks, Nevada! In a grueling 16 hour workday, we were expected to deliver all pre-construction components of a real-life project. Various items included scheduling the overall project, sequencing concrete deck pours, analyzing bids, estimating the cost of the project, and building Revit models.

Heavy Civil was tasked with planning multiple phases of an airstrip while Mixed Use tackled an apartment complex that included parking and significant retail. Design Build, our new and third team, was challenged with designing and planning an advanced inmate facility, which proved to be very exciting. After submitting our project packages, we presented our plans the following day. After all the stress, we celebrated with professional networking in a social environment and a career fair.

Overall, our team had a lot of fun while learning about the details in the construction process. Although we did not place, we improved dramatically compared to last year in all aspects. This upcoming quarter, we plan to have companies host a few in-depth technical workshops. Thanks for everyone's support and hopefully we do even better next year!



The ASC 67 Team in Sparks, Nevada

CONCRETE SPORTS

Concrete sports has had a great year of successful and efficient workdays and expects great things at PSWC 2015.

By Karan Patel

Winter quarter was the busiest yet most productive quarter for our project. Unlike fall quarter, we had workdays every single week throughout the quarter and this frequent workday schedule has helped us to meet our quarterly goals as planned. After the successful casting of our ball during the beginning of the quarter, de-molding caused some minor problems once the concrete was cured. We as a team were able to overcome this hurdle and continued sanding the ball to make it a perfect sphere. Once we achieved desired shape of the ball, we drilled holes and painted the ball according to our theme. Our final ball looks strong and more beautiful than ever before. Along with casting and aesthetics, bowling practice has been our major priority throughout the quarter. Our concrete bowling team is very excited to compete in Pacific Southwest Conference (PSWC) in Tucson, AZ and with all the hard work and dedication, we hope to win the competition.

Update: Concrete Sports finishes 2nd at PSWC.



Drilling in the holes at Concrete Sport's workday.

CONCRETE CANOE

Concrete canoe has really stepped it up this year by having more regular paddling, gym, and track workouts. The very strong team is prime to hit their high expectations this year.

By Abby Gunning

Concrete Canoe has been working hard all quarter long to prepare for Pacific Southwest Conference in April. Demolding of the canoe took place first week of Winter Quarter in order to allow ample time for finishing steps. Numerous iterations of batching, patching, and sanding, were performed to produce a quality final product. In order to achieve a smooth outer layer, a final layer of "frosting" was casted onto the canoe. Finally, stains and stencils were applied to the surface of the canoe to finish the noble *Arcturus*.

In addition to the canoe, the team has been working on the various other aspects of the project: Design Paper, Cutaway Section, and the Project Display. Many late night and even Spring Break workdays were required to complete all aspects of the project.

Paddling practices have been held twice a week on Sunday and Friday mornings. The entire team consists of 4 females and 4 male paddlers. Practices have focused on team races in order to prepare our paddlers for completion. Additionally, gym days have been held every Monday morning and track workouts have been held every Wednesday night. As UCLA has consistently placed third the past four years at regional conference, we are ready to move up in the ranks and advance to the National Concrete Canoe Competition. With strong, and well-practiced athletes, the UCLA Concrete Canoe team is ready to paddle their way to victory at PSWC!

Update: Concrete Canoe finishes 2nd at PSWC 2015.



Demolded *Arcturus*



Sanding down the canoe

GEOWALL

GeoWall has made significant improvements over the past years as they received 6th place out of 20 schools at the GeoWall national competition.

By Rhonda El Hachache

The GeoWall team at UCLA has been excelling from workday to workday, whether it be design enhancement or team building. Members are motivated to make the design the best it could be and to prepare for the competitions that await them. On March 18, 2015, the GeoWall team at UCLA competed against 19 teams from other universities at the International Foundations Congress and Equipment Expo (IFCEE) – GI Geo Challenge (GeoWall). The GeoWall team at UCLA won sixth place out of the twenty schools competing, an improvement from past years. Through continued practice and strong dedication, the team will surely shine at the upcoming Pacific Southwest Conference. GeoWall members are excited to compete and put in their best effort yet.



The GeoWall Team at Geo Congress in San Antonio, TX.

Update: GeoWall finishes 2nd at PSWC.

ENVIRONMENTAL DESIGN

Through trial and error Environmental Design has found an effective method in removing metal from a solution of water. They are very excited to test it out at the upcoming PSWC competition.

By Thomas Choi

The winter quarter has been a wild ride with hours of research, design, and construction to build and complete our project. Our rules were finally released in December and our task this year was to remove Chromium (VI) and Copper (II) from a solution of water. The concept of heavy metal removal spans a vast range of treatment methods and we first chose to test more conventional techniques used widely in industry. With access to Dr. Sim Lin Lau's lab, we tested hydroxide precipitation of Chromium and Copper by using a dilute solution of Sodium Hydroxide to increase pH. In theory, the hydroxide groups react with the metal ions in solution forming insoluble precipitates. As pH increases, this effect should be compounded, but we observed negligible changes to the metal concentration in solution.



Thomas Choi conducts tests in the laboratory.

From there, we sought out more conventional methods including coagulation and flocculation. With consultation from Dr. Miroslav Colic at Clean Water Technology, we tested a dual polymer flocculation approach. After precipitating the metal with a polymer containing dithiocarbamate functionalities on its backbone, we then used a positive cationic polymer then a negative anionic polymer to aid the flocculation process. What resulted were large, single pieces of flocculated polymers that could easily be filtered to remove. This method was excellent at removing metals, but its feasibility to be implemented autonomously hindered its ability to be applied to our final design. Consequently, we ended up designing a simple ion exchange column containing an ion exchange resin, an oxidation reduction media, and activated carbon to remove any organic compounds. This method worked, and we were able to remove concentrations of metal within the upper limit of the competition ranges within a single pass. With our system up and running, we are looking forward to competing at PSWC and coming home with a huge win!

DOGHOUSE

Members of Doghouse have had a great time designing and constructing a doghouse with the good purpose that it will be donated to the Humane Society.

By Jon Wigman

For this year's Pacific Southwest Conference at University of Arizona, each school is tasked with building a sustainable, functional, and geographically themed dog house. The dog houses will be donated to the Humane Society of Southern Arizona. This project does not occur every year but has been featured in the past. This year UCLA will have a Hollywood themed dog house incorporating sustainable features such as a green roof, low VOC paint, and Forest Stewardship Council Certified wood. The dog house is currently set to be painted before the conference. Scores and rankings are given on the final products, and ASCE at UCLA is aiming for first place!

Update: ASCE at UCLA's Hollywood Doghouse receives 3rd place.



ASCE members make marks on the doghouse components.

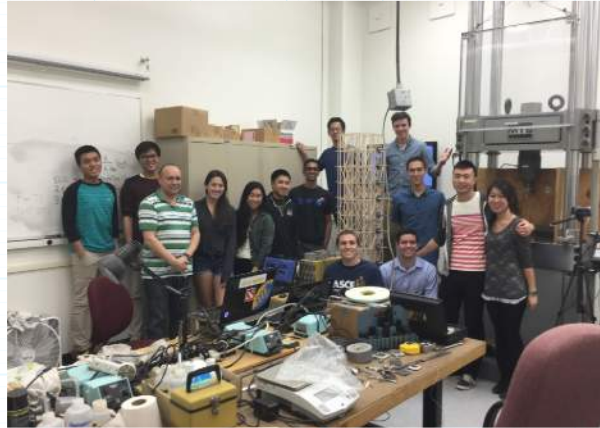
SEISMIC DESIGN

The Seismic Design team really kicked it into high gear this past quarter as they constructed three full scale structural models over a mere 11 weeks—an unprecedented accomplishment.

By Samuel Zabb-Parmley

After a successful Fall Quarter dedicated to recruiting new members, the Seismic Design Team pushed into full gear in preparation for competition. An ambitious goal of constructing three full scale structural models over a mere 11 weeks necessitated efficient means of construction. AutoCAD and SketchUP templates were used to construct prefabricated floors, which were then dropped in place and glued to the structure. Through the hard work and dedication of its members, the Seismic Design Team was able to successfully construct three full scale structures during the Winter Quarter.

Thanks to the efforts of our lab engineer, Alberto Salamanca, all three competition ground motions were programmed and tested for the two prototype structures. This allowed several design iterations, culminating in a robust design that minimizes material usage. Material tests were also conducted for purpose of structural analysis on the models. The Seismic Design Team is sending nine members to Boston for competition in the spring, and is hoping to bring back the national championship title to UCLA.



Shake table testing of the prototype design.

Update: Seismic Design receives 3rd place at the EERI National Seismic Design Competition.

SURVEYING

Surveying has emphasized more advanced and technical concepts to ensure that all its members are well versed and prepared in the project.

By Christian Tran

Surveying at UCLA during the Winter Quarter continued with several workdays a week stretching up to week 9. Moving onto more advance concepts, subjects such as bearing and distance, as well as triangulation were covered in the quarter to make sure that potential team members for conference were well educated on the various events. As well as having regular workdays, we also had a visiting professional surveyor come in for a Saturday workshop to help the team with some of the PSWC concepts. The team for conference had been decided during week 10, and we

are now debriefing on our duties and practicing our calculations for the competition. We hope to make Top 3 this year, and hopefully represent UCLA Surveying well during our time in Arizona!



Setting up the total station during Surveying's workday.

SEISMIC OUTREACH

Seismic Outreach is looking forward to four outreach teaching events that will be held along with one finale event during the spring quarter.

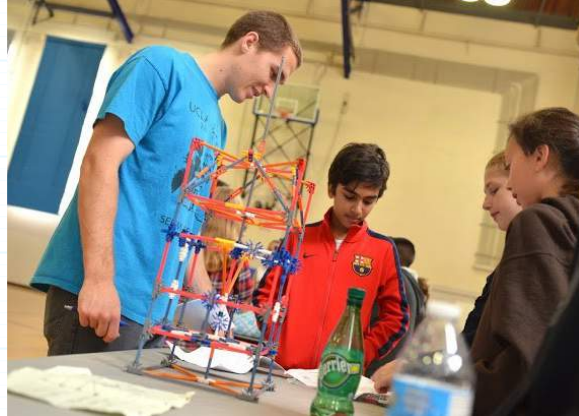
By Ryan Worley

On December 5th, 2014, 225 middle school students attended UCLA for the finale of the Seismic Outreach Program. Earlier in our program, ASCE volunteers twice visited Paul Revere Middle School to teach kids about Seismic Engineering and its importance in California. This was done through interactive lectures, videos, and hands on examples. The sixth grade students were also given a hands-on project where they were able to construct a model skyscraper out of K'NEX.

At the finale, students were able to test their structure on UCLA's shake table under a simulated earthquake. They also received feedback on their project via professionals from Englekirk, Walter P Moore, SEAOSC, and YMF. Students were also given a tour of UCLA by individuals from ASCE, Chi Epsilon, Engineering Ambassadors, and Tau Beta Pi.

As we look towards the future of the program, we see huge potential to affect a plethora of children in the LA area. For spring quarter, we have already arranged for 250 students from two different schools to participate in the program. 4 different outreach teaching events will be held, as well as one finale event. This gives plenty of opportunity for willing volunteers to get involved. We hope that many members of the ASCE UCLA chapter will be able to come out and help us with the event! Our project activity will start as soon as PSWC ends. We hope to see everyone come out!

Please contact Ryan Worley (www.ascebruins.org) if you are interested in volunteering.



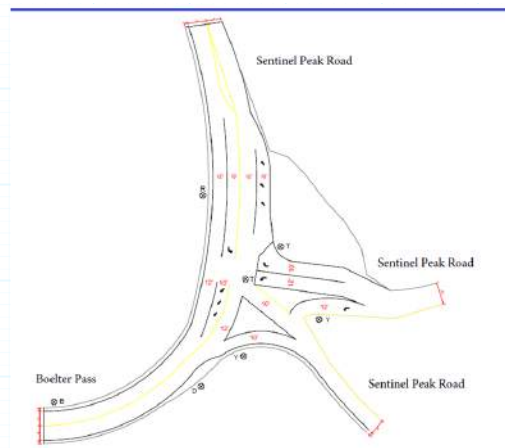
Michael Daciolas kindly assists a student.

TRANSPORTATION

The Transportation project has been great for students who are greatly interested in transportation engineering and would love to gain the experience that other ASCE projects give.

By Zach McFann

The ASCE Transportation Competition is a new project at PSWC this year. Our team designed a roadway connecting two neighborhoods nearby the University of Arizona in Tuscon. Every step of the process that a transportation engineering firm would take was replicated, from designing the vertical and horizontal alignments, the roadway material, the cut-and-fill tables, and the cost estimate. We worked weekly on this project all quarter with a dedicated core of members to finish the report before the deadline. There were a few late nights, but we brought everything together to make a great finished product. We are still wrapping up the poster that will be displayed at conference, and are excited to show off all of our hard work!



Autocad drawing detailing the new intersection design between the new and existing roadways.

STEEL BRIDGE

The Steel Bridge team has undoubtedly demonstrated hard work and inspiring dedication to their project. They have high aspirations for this year and certainly are well equipped and prepared to meet them.

By Alicia Pedneault

Throughout Winter Quarter, the Steel Bridge Team has spent countless hours in the Student Machine Shop to construct the bridge with both precision and efficiency. With the help of the UCLA Civil & Environmental Engineering Department, we were able to receive professionally-performed welds for large portions of the bridge that allow for our design to reach its full strength potential. During this fabrication stage, several members acquainted themselves with the competition construction process by practicing building with last year's bridge. Due to our extensive efforts to remain ahead of our fabrication schedule, we were able to use the remaining few weeks before the competition to make adjustments to each individual piece to provide quick assembly. Simultaneously, the ASCE at UCLA Steel Bridge Build Team performed multiple trial runs to determine the most efficient method of assembly and then practiced throughout spring break. Thus far, our efforts have resulted in cutting the number of pieces of the bridge nearly in half as compared to last year, resulting in a largely reduced construction time. However, we will relentlessly continue to keep perfecting each piece of the bridge and the Build Team will continue to keep practicing until the competition begins. We will be competing in the Pacific Southwest Conference on April 8th-11th against approximately 16 other schools in our region and are hoping to land in the top three teams to qualify for the national competition.



First build practice with last year's bridge.

PROJECTS ENGINEER OF THE MONTH

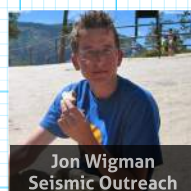
January



Jimmy Chen
Surveying



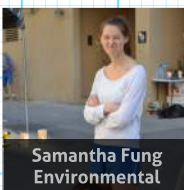
William Yoshida
Steel Bridge



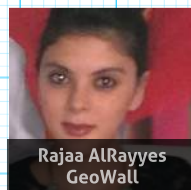
Jon Wigman
Seismic Outreach



Kristina Carter
Concrete Sports



Samantha Fung
Environmental



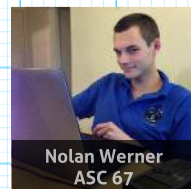
Rajaa AlRayyes
GeoWall



Justine Gee
Seismic Design

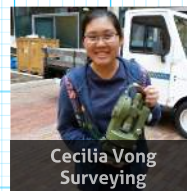


Jon Wigman
Concrete Canoe

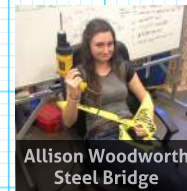


Nolan Werner
ASC 67

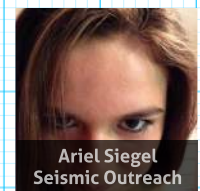
February



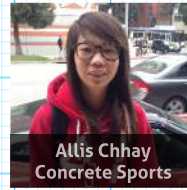
Cecilia Vong
Surveying



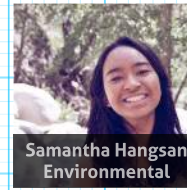
Allison Woodworth
Steel Bridge



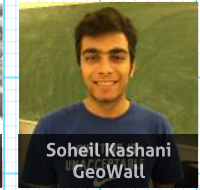
Ariel Siegel
Seismic Outreach



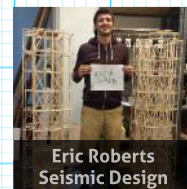
Allis Chhay
Concrete Sports



Samantha Hangsan
Environmental



Soheil Kashani
GeoWall



Eric Roberts
Seismic Design



Kevin Adamson
ASC 67

SPRING QUARTER EVENTS

April 16th, 6PM
Boelter Penthouse

General Meeting with Guest Speaker: John C. Hogan, ASCE Region 9 Governor

April 17th & May 15th, 8 AM - 2 PM
Lincoln Middle School
Seismic Outreach Instruction Day

April 22nd, 6:30 PM
Boelter Penthouse
Core Elections

April 23rd & May 6th, 3:30 - 6 PM
Our Lady of Perpetual Help School
Seismic Outreach Instruction Day

April 24th, 10 AM - 2 PM
Simpson Strong Tie Office, Riverside
Simpson Strong-Tie Field Trip

April 25th, 12 - 5 PM
Boelter Penthouse
LEED Training with Lorne Mtolek

April 29nd, 6:30 PM
Boelter Penthouse
General Elections

May 15th, 6 - 8:30 PM
Faculty Center-Main Dining Hall
End of the Year Banquet

May 22nd, 9 AM - 2 PM
Pauli Pavilion
Seismic Outreach Campus Day

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ASCE at UCLA

Membership Chair/ Seismic Outreach Coordinator
Ryan Worley
rcworley1111@yahoo.com

Mentorship Chair
Blake Wyatt
bwyatt@ucla.edu

Social Chair
Ariel Siegel
ars.siegel@gmail.com

Community Service Chair
Jonathan Wigman
jonathanwigman@gmail.com

Outreach Chair
Allison Light
allison.light@yahoo.com

Conference Coordinator
Kevin Nguyen
nguyennkevin@gmail.com

Media Director
Suraj Patel
suraj.patel@yahoo.com

Historian
Megan Nazareno
mazareno@ucla.edu

Athletic Director
Ryan Dudley
ryanjdudley@ucla.edu

Concrete Canoe PM
Abigail Gunning
agunning@g.ucla.edu

Steel Bridge Co-PM/ MLAB Liasion
Paul Moe Lee
paulmoelee@gmail.com

GeoWall PM
Rhonda EL-Hachache
rhondaelhachache@gmail.com

President
Maxwell Armenta
max.are.menta@gmail.com

Vice President
Gabriel Concepcion
gabrielconcepcion93@gmail.com

Treasurer
Zachary McFann
zmcfann@ucla.edu

Project Executive/ ASC67 Mixed Use Team leader
Norman Chak
nchak11@ucla.edu

Graduate Advisor
Davis Thomas
davis.randolph.thomas@gmail.com

Seismic Design Co-PM
Samuel Zabb-Parmley
samzp@ucla.edu

Secretary
Allison Woodworth
allisonwoodworth1@gmail.com

Steel Bridge Co-PM
Alicia Pedneault
apedneault@ucla.edu

Career Fair Coordinator
Vatsal Gupta
vatsalmgupta@gmail.com

Speaker Coordinator
Matthew Stewart
mattstewart@ucla.edu

Field Trip Coordinator/ ASC67 Heavy Civil Team Leader
Abigail Chung
achung14@ucla.edu

Graduate Advisor
Kyle Tomita
xkit42x@ucla.edu

Seismic Design Co-PM
Michael Daciolas
michaeldaciolas@gmail.com

Surveying PM
Christian Tran
christiantypet@ucla.edu

Practitioner Advisor
Dr. William Goodin
william.r.goodin@gmail.com

Faculty Advisor
Dr. Jian Zhang
zhangj@ucla.edu

Chi Epsilon Liaison
Michael Tsai
michaeltai2011@yahoo.com

CalGeo/ITE Liaison
Clint Bannout
bannoutclint@gmail.com

ASC67 Design Build Team Leader
Samuel Cummings
samuelcummings98@yahoo.com

Environmental Design PM
Thomas Choi
thomas.tchoi@gmail.com

Concrete Sports PM
Karan Patel
karan_50088@yahoo.com