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FROM THE PRESIDENT

I am very excited to present the Winter 2016 Edition of ASCE Bruin to you. We had a very busy fall quarter, and it all began with our Fall Officer Retreat. Back in late September, our officer board members went to Big Bear Lake, California for three nights to prepare for the year and bond with each other. We also wanted to create a mission statement that all members of the officer board had a hand in writing. The reasoning behind this was that we would all buy into it and be able to get behind it. After much conversation and discussion regarding our goals for the year and where we believed the organization should go, we decided on a short, simple phrase: “Creating relationships to build a strong, welcoming community.” We believe that this short, eight-word statement sums up what we want to accomplish for the year and the goals that we are continuously working towards achieving.

During the first few weeks of the fall quarter, we were extremely active in recruiting new members. We reached out to new freshmen and transfer students, as well as students who had not been highly involved with ASCE in the past. In the week leading up to our Officer Retreat, we had events on four consecutive days where we spoke to new members about what our organization does and what they would be able to get out of it. From the Enormous Activities Fair and Engineering Welcome Day to MentorSEAS Training and the first day of CEE 1, we were able to speak with many students two or three times in just a week. In addition to these events, we held our Open House and Fall General Meeting. At our Open House, we showcased all nine of our projects to interested members. Then, in the following week at our General Meeting, we introduced the officer board and invited a guest speaker, Ryan Vanderlip, who was our 2011-2012 ASCE at UCLA President. He spoke about his time in ASCE and how it helped him gain experience and people skills that he has been able to utilize following his graduation from UCLA.

Our projects had their first workdays this quarter, with the project leaders teaching new members about their respective projects and preparing for the busy winter quarter leading up to big competitions like the ASC Regions 6 & 7 construction management competition, Pacific Southwest Conference (PSWC), and EERI’s Undergraduate Seismic Design competition. Our Seismic Outreach project also held its first program of the year where we invited students from Paul Revere Charter Middle School to build structures with K’NEX pieces and subsequently test them on our shake table at UCLA. The program was an extreme success; our team is continuously improving it through feedback from the school as well as internal assessment.

In addition to successful project work this quarter, we had great turnouts at all of our professional events. We held company information sessions nearly every week with a variety of companies. A few of our projects also invited professionals from the industry to...
give insightful workshops that will help our student members in the projects. In addition, we had much success in running our own Résumé Workshop and Career Fair Bootcamp, which helped lead to the largest turnout at our Fall Career Fair in years. There were 30 companies and over 200 students in attendance!

The upcoming winter quarter is going to be another great, busy quarter for ASCE at UCLA. During the first long weekend of the quarter, we will have our annual ski trip at Big Bear, a time when members can get away from campus for a weekend and enjoy skiing, snowboarding, sledding, and snow with friends. Then, 14 of our members will be attending the Workshop for Student Chapter Leaders (WSCL) in Anchorage, Alaska in the following weekend. This workshop will give our officer members a chance to refine their leadership skills and learn new ones with other student chapter members from all over the west coast and professional members of ASCE.

In following month, our Winter Career Fair will take place on February 4th, and we should expect it to have an even larger turnout than our Fall Career Fair. Next, we will send three teams from UCLA to the ASC Regions 6&7 construction management competition in Sparks, Nevada where our teams hope to improve their placement from the past two years. All throughout this time, our other projects will be working hard to prepare for their competitions in early spring quarter. Most of our projects will compete at PSWC and we look forward to taking first place overall after our second place finish a year ago.

We would like to thank our alumni, advisors, sponsors, and members of the UCLA Civil and Environmental Engineering Department for all the help and support throughout the year, as they make all that we do possible.

As always, if you have any questions or comments about anything regarding ASCE at UCLA or would like to increase your involvement, please feel free to reach out to me or any of our officers. In addition, if you ever have any new ideas for our chapter, I would love to hear them.

Zachary McFann
President
zmcfann@ucla.edu
MEMBERSHIP

CHRIS JANSEN

We want to thank everyone who has been actively involved in ASCE at UCLA throughout the fall quarter. We currently have a total of 216 student members, 118 of whom are returning members and 98 of whom are new. This means that we are only 11 members shy of last year’s total count of 227. Considering that we are only a third of the way through the year, it is safe to say that we should soon surpass last year’s count.

One of our biggest goals has been to increase member involvement. Last quarter, we started to implement a member tracking system that utilizes Excel spreadsheets to give us statistics such as which members are most involved, which projects have the highest involvement, which times work best for various events, etc. From this tracking system, we found that, for instance, an average of 38 people attended the info sessions in the fall, with the largest turnout of 50 people at the info session with Accenture! We plan to continue utilizing this tracking system throughout the remainder of the year with the hopes of strengthening our numerical results and pinpointing any noticeable trends in involvement.

All our projects will soon begin putting in long hours preparing for this year’s Pacific Southwest Conference (PSWC) where we will be competing against many other schools in the region. This past year, we were awarded second place overall out of 18 schools, which means that we will be holding ourselves to a very high standard this year. In order to meet our high expectations, we will have to maintain the high levels of member involvement. In addition to PSWC, we will also be hosting another career fair, more socials and field trips, and more info sessions throughout the winter quarter. We encourage all of you to keep coming out to our large variety of events. We call ourselves a family for a reason, and we would love for each of you to experience such a sense of belonging within ASCE at UCLA.

CONCRETE CANOE PADDLING KICKOFF ASCE members at their first paddling session of the year.
INFO SESSIONS & WORKSHOPS

ERIC ROBERTS

This past quarter, ASCE at UCLA was able to promote a strong professional presence in addition to offering many opportunities for our members. From the second week of school through the remainder of the fall season, we welcomed a wide variety of firms on campus for information sessions and workshops, which were highly attended by our members from a range of different age groups and experience levels. We were excited to see many incoming freshmen, graduate students, and students from all academic levels in between. The turnouts were truly amazing and really demonstrated the commitment that our members show toward their professional development and futures.

To adequately meet this high student demand for firms, networking, and learning opportunities in different industries, we were able to successfully entertain companies such as Accenture (Consulting), Turner (Construction), KPFF (Structural), and Kimley-Horn (Transportation Engineering), to name a few, for information sessions. These presentations not only provided useful insights into the firms themselves, but also a solid understanding of the types of work performed within their industries as a whole.

In addition to information sessions, we also hosted professional workshops, which focused on teaching students specific skills. For instance, ASC 67 hosted a workshop to introduce cost analysis and business management using resources from Skanska and Morley Builders. Surveying also invited a professional surveyor to lead a workshop. And as preparation for our recent Fall Career Fair, we held an additional résumé workshop and career fair bootcamp. As we head into a new year, our chapter is dedicated to improving the selection of companies while offering even more professional opportunities for our members!
FIELD TRIPS

ASIA REEVES

ASCE at UCLA took three field trips in the fall quarter that all had amazing turnouts. We visited the Van Norman Complex and a Simpson Strong-Tie facility. We also took a site tour led by Clark Construction of the Engineering VI building on campus. The general turnout for each of these trips was on average 20 students. At the Van Norman Complex, students got to observe the water filtration process and learn how the plant works. At the Simpson Strong-Tie facility, students toured the facility, observed product demos, and learned about the company. Lastly, students walked the construction site of the Engineering VI building and learned about the process of constructing it. Next quarter, we plan on visiting a structural firm like Structural Focus, as well as having a joint campus site tour with CalGeo.

OUTREACH

JUSTINE GEE & MONICA CORBIN

This past fall quarter, we had outreach events with our alumni, professors, and the community.

We had a lot of fun attending the 5th Annual C&EE Alumni Tailgate for the last home game of the football season, which was organized by the lovely Jamie Harlan. There were plenty of laughs, quality tailgate food, and in addition to the many students, an impressive alumni turnout to support their Bruins face off against the Washington State Cougars. It was a great time of connecting and reminiscing with old and new friends!

The much anticipated Fall Student-Professor BBQ was also held toward the end of our fall quarter, where both students and professors alike had the pleasure of gathering together. Professor Stewart and his wife graciously opened up their home to us students as well as a couple of professors in order to enjoy time together outside of school itself. The large amount of delicious home-cooked Italian food as well as the good company made for a truly memorable time.

Our most memorable community service outreach event was the Exploring Your Universe Fair hosted by the UCLA Physics and Astronomy department. We were able to help set up our booth “Civil Engineering at a Glance” where we had over 100 K-12 student visitors and 13 UCLA student volunteers. As the students passed by our booth, we were able to teach them about what structural engineers do and the different techniques that structural engineers use to ensure that buildings and bridges are safe. After explaining the importance of bracing, the students were able to build their own structures out of either K’NEX pieces or toothpicks and gumdrops and then test their stability by loading them with different weights. It was a really fun day for both our volunteers and the students who were at our booth.

For this upcoming quarter, we hope to continue to bring a breath of fresh air to some of our annual events. We plan to arrange another alumni event and more community service opportunities. It was a great fall quarter and we hope that winter quarter will prove to be even better.
SIMPSON STRONG-TIE FACILITY TOUR
ASCE at UCLA members taking a tour of the Simpson Strong-Tie facility at Riverside, California with students from CSUN.

C&EE ALUMNI TAILGATE
Students, alumni, and professors sharing their love of barbecued food at the annual alumni tailgate party at the Rose Bowl Stadium.

EXPLORING YOUR UNIVERSE FAIR
ASCE volunteers helping K-12 students learn about structural engineering with simple demonstrations using K’NEX pieces, toothpicks, and gumdrops.
ATHLETICS
MATT BURKE

During fall quarter, we participated in men’s flag football on team Real Men of Genius, co-ed flag football on team Steel the Win and co-ed futsal on team Kickin Asphalt. Real Men of Genius went 3-1 in the regular season before its loss in the first round of the playoffs in a close game while Steel the Win went 1-1-2 and ended the season on a good note with a last second win. Finally, Kickin Asphalt went 4-0 in regular season, but unfortunately, it lost an extremely tight game in the second round of the playoffs. Abby Gunning was our Athlete of the Quarter and Maxwell Armenta and Nolan Werner were our Honorable Mentions. In winter quarter, we look forward to playing basketball, soccer, Cornhole, and Spikeball. We encourage all ASCE at UCLA members to keep coming out to our large variety of events.

SOCIAL
KRISTINA CARTER & KYLIE WILLIAMS

This fall quarter, we had many socials to foster friendships among new and old members of ASCE at UCLA. About 60 members came out to our first ASCE tailgate for the UCLA vs. ASU game. We ate burgers, played games, socialized, and watched the game as a group, which were great ways to get to know new faces and show school spirit together. A few weeks later, we got into the Halloween spirit by carving pumpkins in the ASCE lounge. This event was a huge success, because a lot of freshmen and new ASCE members attended and carved some really cool designs. We also enjoyed an on-campus laser tag in the sculpture garden where we had a great time running around outdoors and bonding with with each other. Next quarter, we look forward to our annual ski trip in Big Bear and some more fun socials with other ASCE student chapters.

1. FUTSAL
Maxwell Armenta playing as the goalkeeper for Kickin Asphalt.

2. FUTSAL
Kristina Carter driving the ball past her opponents.

3. FLAG FOOTBALL
Co-ed flag football team showing some spirit after ‘steeling’ the win.

4. LASER TAG
ASCE members getting ready before their first round of laser tag.

5. PUMPKIN CARVING
ASCE members showing their carved pumpkins in the ASCE lounge.

6. PUMPKIN CARVING
Fellow pumpkin carvers using saws to cut holes in their pumpkins.
Mentorship hit the ground running in fall quarter with a flurry of events. The first was Family Sorting where our members were filled into one of six families and then paired with either a mentor or mentee. The families were Aggregate, Soldier Pile, Earth Club, 71 Percenters, We Get Around, and Truss Me. Throughout the quarter, these families were placed against each other in competitions to earn points. There was Family Field Day where members participated in friendly games of ultimate frisbee and soccer. Winners also received points in the subsequent Family Cup Race.

Points can also be earned and accumulated by attending workdays, information sessions, IM sports games, and other ASCE events like our Class Planning Workshop. UCLA Engineering department counselor, Jan LaBuda, led the workshop where she helped students plan their future class schedules to graduate on time. Jan was able to provide in-depth assistance and tips to individual students. We wish to have more similar mentorship activities next quarter.
ASCE’s Fall Career Fair was one of the largest fairs that our organization has had in several years. With a total of 30 companies and 220 students in attendance, the Fall Career Fair marked a great achievement for the ASCE Industry Team.

The represented industries included construction management, structural, environmental, hydrological, transportation, geotechnical, and even the Navy recruiting team. The event was held in Ackerman Grand Ballroom from 10 AM to 2 PM, giving the students plenty of time to meet and network with the companies at the fair. With the help of the ASCE student volunteers, the entire event ran very smoothly, and overall, our club received a very positive response from the company representatives.

Over winter break, our Industry Team will start preparing for the Winter Career Fair. We are expecting to exceed our Fall Career Fair turnout and bring out an even greater variety of companies. To help boost our company and student turnout, our Industry Team has taken on four Industry Liaison Interns who will help our team contact companies for the upcoming fair and advertise to students across campus. Our Industry Team is looking forward to another successful career fair that will help ASCE members secure a summer internship or job!
Our goal at the beginning of the year was to improve collaboration and communications between ASCE at UCLA and the other civil engineering clubs. In addition, we wanted to expand upon this goal by enhancing relations between engineering organizations like ASME, IEEE, AIChE, and more. The benefits of achieving such unique goals are immense for all the societies and their members.

In order to work towards creating an environment of cohesiveness and collaboration between the civil engineering societies such as ASCE at UCLA, ITE, CalGeo, and Chi Epsilon, we planned a joint social on October 16th. Rallied behind the banner of “We Are Civil,” over 35 members from the four clubs descended upon In-N-Out to grab food before watching the thrilling movie *The Martian* at the FOX Theaters in Westwood. To conclude the night, students had more time to socialize with each other at the post-movie video game social. We were ecstatic to see many students from a wide range of years, backgrounds, and civil engineering emphases attending this joint social event.

The next step towards building an open community involved planning an interactive event among all the engineering organizations. Under the banner of “We Are Engineering,” the ultimate frisbee tournament was planned on November 10th. By partnering with ESUC, the event was heavily publicized to all the organizations. The participating clubs included AIChE, ASME, IEEE, UCLA Racing, HKN, Engineering Ambassadors, and us, ASCE. The single elimination tournament also had a unique set of prizes and conditions for the winners. To support partnership between clubs, every losing team was asked to give its club shirt to the organization they lost to for display. Furthermore, the championship team would receive the UCLA Engineering Bowl Trophy and ESUC shirts for its players. The tournament started at 7 PM on the IM Fields with two new games occurring every 30 minutes. The games were fierce and the number of remaining teams in the tournament halved in every half-hour period. But, in the end, our ASCE team We Are Civil won the tournament.
Our team advanced through quarter and semi-finals by defeating UCLA ASME and then AIChE: Dynamic Discosity due to our athletic and determined players. Only after the hard-fought Championship Game against the AIChE team was our team We Are Civil able to rejoice as victors of the first ever “We Are Engineering” event. With over 180 students in attendance and 10 participating teams, the tournament was a welcoming setting for different club members to interact with each other. Many students expressed positive feedback and a strong interest to plan similar events in the future.

Forming an extensive and friendly community among the civil engineering clubs as well as bringing the engineering organizations closer together are actions that have long been overdue. The outcome and success of our first “We Are Civil” and “We Are Engineering” events show that we are indeed on the path towards achieving our end goals. Regardless of what banner we rally behind, the process for the quarters to come remains the same - building a community in which We Are TOGETHER.
The Pacific Southwest Conference (PSWC) is an annual competition among 18 different ASCE chapters from schools around the Pacific Southwest.

At the conference, our Concrete Canoe, Concrete Sports GeoWall, Environmental Design, Steel Bridge, and Surveying projects compete against teams from other schools. The top teams from this conference then go on to compete at national competitions.

PSWC is fun for ASCE members who are not in a project as well. Students can join a variety of sports teams like volleyball, soccer, and ultimate frisbee and compete against other schools. Plus, there are also the career fair, banquet, talent show, and many other fun events that are all great opportunities to meet other students from different schools for some fun and friendly competition.

This year, the conference will be held at California State University, Long Beach during March 31st to April 2nd, the weekend of the first week of spring quarter.

We have made arrangements for a hotel and completed some other minor preparations. All our members in the projects that will compete at the conference have been working very diligently. So far, our GeoWall project team has submitted a proposal. Our Concrete Canoe team is finishing its design report that will be due at the end of winter quarter, and our other projects will be submitting their proposals soon enough.

During fall quarter, many members of our ASCE at UCLA chapter also participated in a “mini” PSWC event at Long Beach, California with USC, CSU Long Beach, and CSU Pomona. Given that this location is where this year’s conference will take place, it gave us a chance to experience the atmosphere of the competition beforehand. At this event, we brought our past canoes and paddled with members of the other present ASCE student chapters.

In the winter quarter, we will be ramping up preparations for the conference and focusing on transportation, T-shirt designs, dinner locations, and other logistics. Be on the lookout for another PSWC info session where you can find out more about the conference as well as prices and registration deadlines!
This past fall quarter has been a busy one for the Concrete Canoe project. With paddling, mixing, mold construction, and R&D, our members have put in a combination of over 1,500 hours! Just like in previous years, our members have been hard at work since day one to create the male mold, which is cut from half foot foam blocks using a hot wire cutter. This year, we created two hot wire cutters in order to push the schedule while still maintaining a high level of quality control during mold construction. With the male mold completed by the end of fall quarter, this gave the team the entire winter break to ensure that everything is properly prepared for casting day on January 9th!

Meanwhile, our mix design team has also been hard at work. This year, the mix design team had separate mix workdays to develop a stronger, more sustainable mix design for our structural concrete. Our mix design team has also been experimenting with pigments to create a finishing mix that will really stand out during the final competition, given that the rules now state that stains are not allowed.

Due to our large amount of work and variety of workdays, the UCLA Concrete Canoe team has been able to obtain a lot of new, talented members. Thanks to the heavy involvement from our freshmen, which make up the majority of our new members this year, the project is aiming to advance to the national competition yet again!

In order to gear up for the regional competition at PSWC, our team gathered with USC, CSU Long Beach, and Cal Poly Pomona to compete in friendly races at Mother’s Beach in the recent “mini” PSWC event. These races gave younger members the opportunity to paddle against members from other schools in competitive sprint races that are similar to those in the actual competition. In addition, the team hosted a movie social with members from the UCLA Steel Bridge project and a Hollywood sign hike to bond as a team.

As we look ahead into winter quarter, there is still a lot of work to be completed. Besides casting our canoe, we will also be completing our stands, display, design report, and canoe aesthetics. The winter quarter will be yet again filled with hard work, but given our passionate team, we are ready to create a canoe that will compete with the best!
The Environmental Design project is a great opportunity for students to get hands-on experience with water treatment and some exposure to water management. Each year, we design and build a water treatment system for a specific task. In previous years, we were tasked with removing certain ions from a contaminated water supply. This year, we have to treat grey water, which is a common runoff from sinks or showers. Also, the system must be able to run handsfree and treat the given water sample in just two hours. However, the main challenge is still the same; we must treat the water using the lowest cost and most effective system possible.

To keep our team ready for the upcoming competition this past fall quarter, we conducted hands-on tests and experiments with some standard treatment methods. One of the methods that we explored heavily was coagulation and flocculation to clarify water. It was a great opportunity to show new members a water treatment method that is practiced at nearly all water treatment facilities. In addition to these demonstrations, we also took a previous set of competition rules from a different regional conference and did a small, mock competition. With a combination of a sand filter and other treatment methods, we were able to take a cloudy and brightly colored water sample and turn it into a clear sample of water fit for disinfection and consumption. This also gave us a chance to work in a lab and practice water quality analysis techniques that will be very important when the true competition begins in winter.

Outside of technical workshops, we attended some of the Hammer Museum’s talks on the state of the world’s water, ranging from topics such as the California drought and water rights to treatment of water in third world countries. We also continued a past project tradition by again hosting a board game night for our members. Looking forward into winter quarter, we will hit the ground running with a strong team to bring our best work to competition in the spring.
Concrete Sports is a fun and hands-on project that constructs a concrete bowling ball and then competes at the Pacific Southwest Conference every year. Over the course of the project, members make the ball from scratch as well as bowl the ball at the competition, which is a test of mix knowledge and physical bowling skill. The project’s defining aspect on whether or not it succeeds at conference is mostly based on the concrete mix, which must be a good combination of strength, weight, and durability. Another fun part of the project is creating a theme for the bowling ball, since each participating school team must have a theme for its yearly design.

So far, we have had four workdays within Concrete Sports. We have covered an introduction to our project, entry-level mix design, and practice on casting on our last workday. There have also been two additional workdays where our members were able to go outside on top of Bomb Shelter at UCLA and bowl a couple of frames with previous years’ bowling balls.

We are still looking for a theme for the upcoming competition and finalizing our concrete mix over winter break. For the winter quarter, once the conference rules are released, we will create a new mold, make the new bowling ball, and practice bowling weekly in order to place well in the conference.
GeoWall will be competing at both Geo-Congress and PSWC this year. We build a small-scale earth retaining wall using poster board, construction paper, and tape. The competition involves using the least amount of material to reinforce the retained soil and the design loads; this is analogous to creating the most cost-effective design in a real-life situation.

During the fall quarter, the team has had to adapt the wall design to the new prompt for this year’s GeoWall competition. The wall must be able to support two laterally loaded piles on a loaded structural load frame that holds a bucket with 25 extra pounds of soil in it. In addition to doing practice builds, we conducted lab tests to determine and analyze the properties of the soil and the most effective angle for placing the reinforcement strips. We have also been practicing a new technique of cutting out the strips and holes in the poster board since this year’s competition rules have prohibited the use of our beloved box cutters!

The national competition, Geo-Congress, will be on Valentine’s Day weekend in Phoenix, Arizona in the winter quarter. Up until then, our GeoWall team will be showing some love for our project by practicing every week under time constraints for the exciting event. Our goal is to expose new members to the humble, yet incredibly important world that is geotechnical engineering.
The Steel Bridge project is tasked with designing, fabricating and constructing a roughly 20-foot long bridge entirely made of steel. This year, we are building a long span bridge with a river underneath that is six and a half feet wide. We also have the added twist of not being able to cross the river and being able to put two pieces together in the staging area before we take it out into the construction area during the build. The challenge for this year is to find a way to connect and build the bridge at the center of the span. This is due to the inherent sag that happens when trying to connect two cantilevered ends.

We are on schedule to completing this year’s bridge due to the dedication of both our new and returning members. The returning members came up with the overall shape of the bridge during the summer, and when fall quarter started, the newer members made great efforts to help with the design. Because of the mixture of fresh experience in our team this year, the SAP design went smoothly. We were also able to start conceptualizing how we want to build the bridge this year with the new set of rules and start practicing our builds with the previous bridge. Great strides have been taken to solidify the groundwork that is needed to make the steel bridge team a consistent national competitor.

This year, our design is similar to last year’s national winner’s design. It is a superstructure with a space-truss span. The superstructure is made of a wide circular tubing that will take the majority of the load while the space-truss helps with lateral deflection. We are looking to decrease our deflections and our build time this year at the cost of weight. Weight is a minor factor this year as it costs half as much per pound than it did last year, so we are being liberal with that aspect of the bridge.

Winter quarter is the beginning of our fabrication phase. We had many students obtain shop training last quarter in order to hit the ground running. We will be fabricating every piece of the bridge this winter quarter and forming a construction team that will compete at the Pacific Southwest Conference (PSWC) at the beginning of spring quarter. If all turns out well, we will also be competing at BYU for the National Student Steel Bridge Competition, hosted by the American Institute of Steel Construction (AISC).
Instead of constructing a concrete canoe or a balsa wood tower, Surveying’s yearlong project involves building amateur surveyors! In our biweekly workdays during the fall quarter, we have learned how to measure elevation changes through differential leveling, horizontal distances with taping, and coordinates through traversing (thanks to our successful Professional Surveying Workshop - see below). Considering that many of our members did not even know what an automatic level or Philadelphia rod were entering the school year, we have accomplished a lot in only four weeks’ worth of workdays! In addition to helping each other learn at surveying practices, our members have grown closer through our socials, including Korean BBQ dinners and board game nights. With our mantra of “survey hard, play hard,” our team has been able to grow and double last year’s size and still retain a consistent crowd each week.

One notable event that we have done in the fall quarter was inviting a licensed surveyor to the club’s first-ever Professional Surveying Workshop in mid-November. Bill Hofferber has over 30 years of surveying experience, including teaching at local colleges, which was clearly seen in his informative lesson on traversing and interesting stories about the field. The workshop was a success, attracting a large attendance of members from the Surveying project as well as other ASCE projects at UCLA. Bill will be returning again next quarter for another workshop and continues to be a valuable resource to our team.

In addition to the workshop, our project hopes to receive the competition rules for the regional conference (PSWC) early winter quarter, so that officers can select a team of four and begin more focused practices. Thanks to Professor Robert Kayen, the competition team can also begin practicing with the total station, which is an essential piece of equipment for any survey party. With a great fall quarter under our belts, Surveying is sure to have yet another exciting season in the winter!
Each February, ASC 67, UCLA's construction management project, brings teams of students to participate in the Associated Schools of Construction's annual student competition. The three teams each compete in a different category of the competition: design build, heavy civil, and mixed use. On the morning of the competition, each team receives a prompt. By the end of the day, the teams prepare preconstruction materials, including quantity takeoffs, cost estimates, schedules, and site logistics plans. The next day, the teams present the bids to a panel of judges, industry professionals from the sponsoring construction company. The school teams with the best presentation and overall approach to the prompt get the top places in the competition.

This fall, our team captains presented workshops on cost estimation and scheduling, in addition to individual team workdays throughout the quarter. Then, six members from each team were selected near the end of the quarter, along with two alternates for each team, making a total of 24 UCLA representatives at the competition this year. Throughout the quarter, the teams worked with their respective industry coaches to learn and practice construction management skills that are needed for the competition.

During the first few weeks of winter quarter, the three teams will continue to practice and prepare for the competition. In early February, our teams will travel to Sparks, Nevada to compete. Now that our project is going into its third year, we are continuing to improve our construction skills and knowledge to strengthen our younger members' experience and to become a well-established construction management program at UCLA.
With a group of eager newcomers, the Seismic Design team had a really successful fall quarter. In preparation for this year’s competition in San Francisco, the members quickly picked up on the required construction skills by working on a small-scale structure in groups that were headed by the project directors. Each team designed and built a one-story building, which was then tested with gravity loads to failure, allowing the members to see why certain configurations worked better than others. Also, we held mini lectures held at the beginning of each workday to help teach them about basic structural and earthquake engineering. Furthermore, we hosted a SketchUp tutorial, so members were able to familiarize themselves with modeling programs that are essential to the design and construction of our final building.

Aside from general workdays, a new component for this year is the addition of our weekly architecture and design meetings. Having an amazing group of students from the architectural department working closely with us, we were able to come up with an innovative building silhouette and rendering for this year’s design! In addition, these design meetings also served the purpose of challenging our younger members to think of possible structural systems for the building. Every week, we also check in with our faculty advisor, Professor Jian Zhang, to discuss our project’s progress and potential structural design ideas.

With the initial design already set, construction of the first prototype structure has already begun! Winter quarter should be super exciting as we are looking to finish this prototype within the next few weeks, so we can test it on the shake table and see how well our structure holds up. The rest of winter quarter will be dedicated to modifying and improving our design to be more efficient as well as teaching new members about structural analysis. All in all, we have a solid foundation, a promising team, and a structural design that should be a strong contender for first place at this year’s competition!
Seismic Outreach is a unique program designed to integrate fundamentals of structural engineering with California’s standards for K-12 earthquake education. Through a series of interactive classroom presentations, participating students gain the skills and knowledge to complete a K’NEX design challenge that culminates in a field trip to our very own UCLA campus for a fun competition, hands-on learning activities, and a campus tour.

CAMPUS TOUR
Students getting ready to tour the UCLA campus.

This fall quarter, we partnered with Paul Revere Charter Middle School and invited over 300 sixth grade students to participate in our program. Over the course of the program, members from our Seismic Outreach program paid three school visits to teach the middle school students basic engineering topics involving fun math! Each time, we worked with the students to design and build effective and cost efficient K’NEX structures.

We also had weekly team workdays to prepare for the finale event, where the middle school students come to us at UCLA for some fun competition and hands-on activities! We were fortunate to have over 60 student and professional volunteers. Our sixth graders had a great time competing against each other as their structures were tested on a shake table while judges scored them based on architecture, creativity, and engineering design. The students also had the opportunity to tour the UCLA campus and build and test paper bridges.

Our fall program was a great success that would not have been possible without the help of all the teachers, parents, and volunteers. In winter quarter, we will not be putting on a program but instead be focusing on fundraising and improving Seismic Outreach for our students in the spring.

SCHOOL VISITS
Seismic Outreach members working with students on their designs.

SHAKE TABLE TEST
Students cheering after passing the shake table test.
BRYAN HONG

I flew back to Vancouver to spend the winter break with my mom and friends. It was raining a lot in “Raincouver,” so I spent a lot of time watching movies from the IMDB Top 250 list at home. Also, I helped my mom with chores and relished her cooking. When I was not at home, I met up with friends to talk about college and bragged to them how awesome UCLA and ASCE are. My mom and I also went to Seattle and Portland to ski and shop. I look forward to winter quarter!

JASON KIM

Over the winter break, I was given the opportunity to explore various areas of South Korea with my family. Although it was not quite close to “spirit searching,” the journey was nonetheless exciting and filled with precious moments. I was constantly marveled at all the diverse and wonderful places in my native country that I did not know they existed!

JORGE BARRIO

I spent this winter break going on ski trips with my family and friends and enhancing my skills in film editing! I love to ski and I wanted to spend time to perfect my form this winter. Due to a tough academic quarter and hefty workload over the past couple of months, I have not been able to delve into my passion for filmmaking as much as I would have liked to. I also wanted to take advantage of the break to do just that!
THANK YOU TO OUR SPONSORS!

We would like to thank our following sponsors for donating their resources and time to our organization. We are truly grateful for all the wonderful and kind support, and we hope that our partnership with these sponsors will continue in the years to come.