

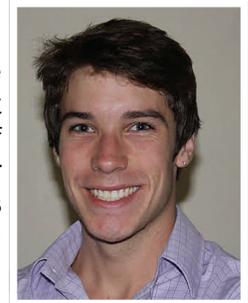
ASCE BRUIN

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LETTER FROM THE PRESIDENT

Dear Student, Alumni, and Faculty



I am proud to present to you, the Winter 2012 edition of the ASCE Bruin. This edition aims to provide an overview of what our club has accomplished this quarter. I have seen a lot of great things from our ambitious and relatively young officer board this quarter, and I know I can expect even greater things during the remainder of the school year. I am honored to lead one most talented and driven officer boards at UCLA

This has been a quarter of great transition in many ways for the organization. Due to the scheduled demolition of Engineering I our lab space was moved to the old Life Science building this past summer. As a result of the demolition and ongoing construction, we also lost access to our concrete canoe and steel bridge work sites. We are engaged in ongoing negotiations with the Dean's office to secure a viable permanent workspace and are thankful for the support we are receiving from the CEE department in this matter. Our project executive and project managers have taken this challenge in stride and have made the most of the temporary space the CEE department has given us.

At the onset of winter quarter, the projects will be firing on full cylinders as our regional conference approaches. This year the event is being hosted by Cal Poly Pomona, and is scheduled to begin March 22nd. Our seismic design and geotechnical teams will also be attending the EERI and Geo-Institute national conferences respectively, which take place shortly after our regional conference.

I will now take the opportunity to introduce our new faculty advisor for the 2011-2012 school year, Dr. Gaurav Sant, Assistant Professor and Rice Chair of the CEE department. Our organization would especially like to thank him, Department Chair, Professor J.S. Chen, and Practitioner Advisor, Mr. Bill Goodin for their ongoing support. In addition I would like to thank all of our sponsors for providing the funding necessary to sustain the competitive level of our projects and the volume of programming we conduct in the interest of developing the young engineer on a professional and social level.

If you would like to get involved or have any questions, please feel free to email me at vanderlip.ryan@gmail.com.

Sincerely,

Ryan Vanderlip
President, ASCE UCLA

PROFESSIONAL DEVELOPMENT

ASCE has been building relationships with professional societies including MLAB, LA_YMF, WEF, and LABS of CWEA in addition to relationships already present with our sponsor companies, giving members more opportunities for professional development. ASCE was able to host a variety of events, both new and traditional, that enabled our members to gain a broader knowledge of future opportunities in the civil engineering profession.

WORKSHOPS AND PRESENTATIONS

BY AMY DERRETT

This quarter ASCE hosted several project and career development workshops. We worked with MLAB ASCE YMF to host a resume workshop in anticipation of our career fair. The YMF members were a great help with editing, critiquing and preparing us for the big day. We also worked closely with WE O'Neil to host two workshops, one specific to budget and the other for scheduling. Both presentations shared useful insight to programs we have access to and may use for projects as well as down the road in the work world.



CAREER FAIR

BY BRIAN WALZ

The ASCE Fall Career Fair took place on Wednesday, October 19, in the Kerckhoff Grand Salon. There were 140 students in attendance, most of whom were civil engineering majors looking for either internships or full time positions upon graduation. The students had the opportunity to pass out resumes and talk with seven different companies, the majority of which were involved in either construction or



structural design. The companies all had some sort of poster-board and display, which detailed what their company did and what they were looking for in their job candidates. The event lasted roughly four hours, not including setup and cleanup, and the feedback from companies was almost all positive. Many students were called back for interviews in the weeks following the fair, and all but one of the companies plan on attending our second career fair in January.



INFOSESSIONS

BY KENDRA RUSINEK

ASCE hosted two information sessions for Shimmick Construction and Turner Construction companies in order to facilitate recruitment and employment opportunities. Both information sessions gave insight into the general workings of the companies, as well as an overview of what sort of opportunities are available in the construction field.



FIELD TRIPS

BY KENDRA RUSINEK



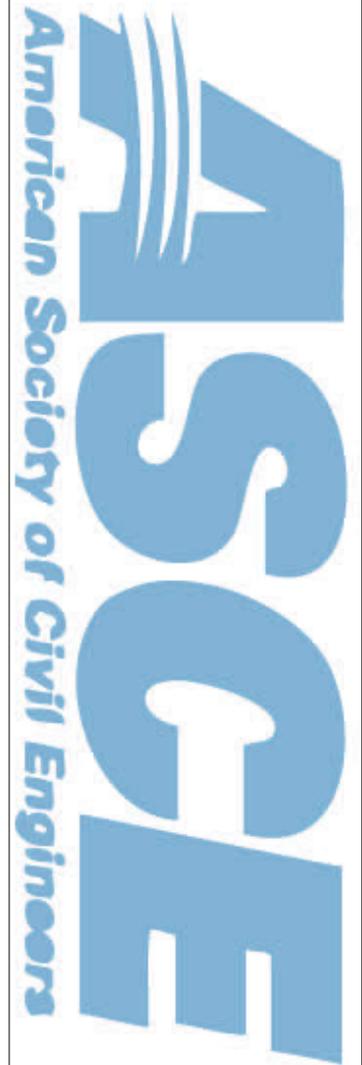
ASCE coordinated with LABS of CWEA for two field trips this quarter, the first being a tour of the Malibu Water Treatment Facility, and the second being a tour of Space-X. Both of these tours gave members the ability to gain knowledge outside of the classroom and network with professionals in the water industry. We hope to continue taking advantage of these opportunities throughout the upcoming year.

OUTREACH

HALOWEEN STUDENT PROFESSOR BBQ

BY AMY DERRETT

Professor Stewart was kind enough to host the annual ASCE Student Professor BBQ the Friday before Halloween. The Stewart family and ASCE members didn't let us down in terms of costume attire. We had a great night mingling with some new members as well as professors. It was a good time to chat with friends outside of the classroom and enjoy a BBQ dinner many of us wouldn't get in the dining halls or in our own apartments.



ALUMNI TAILGATE

BY AMY DERRETT

The alumni tailgate was an overwhelming success thanks to Pat Ho. He did a great job contacting alumni from all years and we had a great turn out. It was nice to see how successful all the UCLA grads are and where they have ended up. It opened up a lot of students' eyes to different career paths and jobs that are available in the civil sector. Great turnout, great food, and great company!



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SPEAKERS

BY KENDRA RUSINEK

Besides the general information sessions, this quarter ASCE began hosting once a month General Meetings. These meetings are designed to inform all of our members about the progress and how to get involved in the different projects, as well as give members exposure to a variety of civil engineer professions by hosting a speaker from industry. This quarter, we held one general meeting and hosted Kaplan representative Turk Dano and Nabih Youssef and Associates Structural Engineer Kate Funk. Turk gave a brief presentation about the different standardized tests that Kaplan offers, and the requirements for various graduate programs. Kate Funk then gave an inspirational and insightful presentation on how she got where she was today through her education and professional experiences, and encouraged students to get involved and be proactive. Finally, Kate Funk also described her experiences working at the smaller structural engineering firm of Nabih Youssef and Associates and provided insight into the structural engineering profession.



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GRADUATE SCHOOL PANEL

BY KENDRA RUSINEK

In order to further members' knowledge about future opportunities, ASCE hosted a graduate school panel with representatives from the business school, industry professionals, professors, and a graduate student. The panelists gave their varying perspectives on the value of attending graduate school, the application process, and the different degree options available for further education.



STUDENT LIFE

ATHLETICS

BY ROBERT EBERT

Fall quarter 2011 brought ASCE's fiercest competitors out to the football field and volleyball court to compete in men's flag football and co-ed volleyball. Both teams demonstrated a lot of heart throughout the season and every player gave it their all during many tough and close games. The Raging Rhinoceroses, our fearless football squad, finished the regular season strong with a 2-2 record, earning them a berth in the playoffs. Several stars shone brightly on that team, including a tremendous punting effort by Brian Walz, Olympic caliber speed from ASCE president Ryan Vanderlip, and a strong pocket quarterback in Dominic DiTullio. When the playoff started, the Rhinoceroses came out to win, and played a fierce defensive battle against the Essekers and pulled out an 8-7 win, thanks to great coverage from the cornerbacks and safety to stop a Essekers 4th quarter drive. In the second round the Raging Rhinoceroses miraculous run was stopped, as they fell short against Wiggle Wiggle Yeah!!! ASCE's volleyball team, the Leaping Lemurs, faced stiff competition in UCLA Recreation's Independent A league. Nevertheless, they still came out with a winner's attitude and played their hearts out for ASCE. Led by Daniel Lafranchi and Molly Meertens, the Lemurs put up tough fights against all their opponents, but unfortunately consistently came up short and finished a winless 0-4. Still, the team gained valuable experience for next season. Both teams also helped draw new members and interest in ASCE. Games were an opportunity not only to focus on competition and forget about school, but to discuss other project events and stay informed of ASCE workdays. Overall, the fall sports season was a resounding success, and ASCE looks forward to another strong run in basketball and soccer in the winter.



MENTORSHIP EVENTS

BY HALEY PIPER

Last quarter, we held three mentorship events. This was the first year of the HSSEAS Mentorship program, in which each incoming freshman and transfer student received a trained, upperclassman mentor. ASCE hosted the events for all 95 mentees and 25 mentors in the Civil and Environmental Engineering major. We also had a supplemental mentorship program for members who were not a part of the official mentorship program, which consisted of second year students or undeclared engineering freshman paired with fourth years.



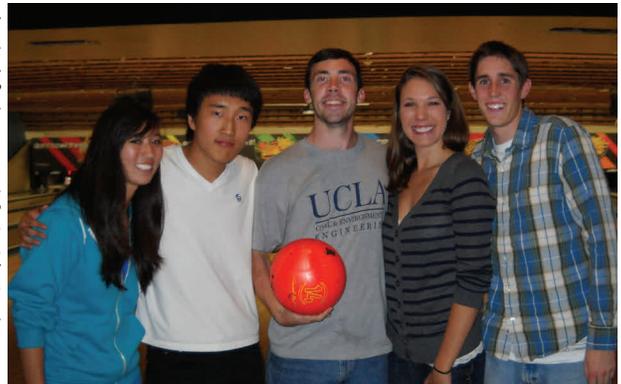
Mentors and mentees first met at our Open House at the beginning of the quarter. We also held a class planning workshop before winter enrollment so that we could introduce new students to the specific classes and tracks in the major and answer any questions they had about enrollment in pre requisite and upper division classes. The workshop also gave mentees a chance to work with their mentors to plan their schedules out for the next two or three years. Our final event of the quarter was a ginger bread house making event.. This has been a recurring event for the past few years in ASCE. We broke mentors and mentees up into four groups and each built their own ginger bread structure.

SOCIAL EVENTS

BY HALEY PIPER

In addition to mentorship, we had a few successful social events last quarter! We had an ASCE tailgate in the middle of the quarter. Members carpooled from UCLA, ate and socialized, and attended the game together. We also had a bowling night at Santa Monica's AMF Bay Shore Lanes.

For Winter we are currently preparing for a Big Bear Ski and Snowboard trip during Martin Luther King weekend. If you're interested in coming along, it'll be about \$100/person to stay in a cabin for the weekend (meals included). We'll leave for Big Bear Friday night and head back to UCLA Monday morning. We aren't providing equipment or lift tickets to ski or snowboard, but we will be organizing rides to the resorts.



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PROJECTS

CONCRETE CANOE

BY SAMARA AL-JUMAILY AND BRYAN CARPENTIER

This year's concrete canoe, Hakuna Matata, is progressing right on schedule and we've accomplished so much already! This year, we are building on last year's success as well as experimenting with new concepts. For the second year in a row, we had our male mold professionally machined again this year, using light-weight EPS foam for easy transport and cost efficiency. Our design for the canoe emphasizes compactness; it is thinner, narrower at the midpoint, and shorter at only 18 feet, to aid in steering. Our mix has also been improved, partly due to a change in this year's rules that eliminated the requirement for heavy sustainable aggregates. Using fibers, glass bubbles, crushed glass, and slag cement, the mix we have developed is both stronger and lighter than past years', resulting in a final canoe weighing in at less than 150 pounds.

During fall quarter, we cast two canoes (one prototype and the final), and have left them to cure over winter break so that we may start finishing and working on final product at the beginning of winter quarter. The theme we have selected this year draws inspiration from the African savannah, which will be portrayed through intricate designs on the interior and exterior of the canoe as well as an elaborate display table and stands for regional competition. It's never too late to get involved in the project, as we have a huge amount of work left to do. Watch our weekly email for Winter workdays. We are thrilled for the upcoming competition at Cal Poly Pomona with what is proving to be our most promising canoe yet! Hakuna Matata!



SURVEYING

BY NICK ORTON

This year the ASCE Surveying project is progressing into the future. By requiring the use of the non-reflectorless total station during competition, the project looks to impart knowledge of more technologically advanced surveying techniques. Fall quarter provided the surveying team with an interesting challenge in helping prepare Engineers Without Borders for their trip to Nicaragua. The surveying team met and conferred with EWB, helping them to determine the most effective way to survey and level the plot of land they are using for a schoolhouse.



Next quarter the surveying team plans on practicing and perfecting the use of the non-reflectorless total station, so come out and join! There are still spaces on the team, and don't forget this is the only place you can get hands on experience with surveying techniques to prepare you for the EIT and PE exams.





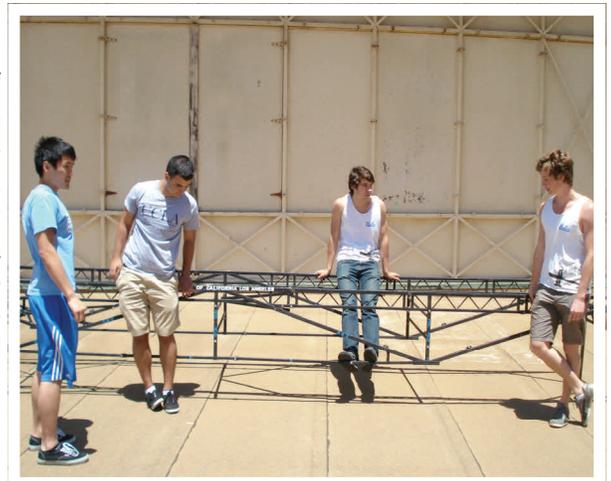
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STEEL BRIDGE

BY TAHER GHAEMI

In the first few weeks of fall quarter, we spent most of our time focusing on the design of the bridge. We had a large group collaborating to form 3 different designs with the goal of choosing the best elements of each design and optimizing a final design. This process involved several days of using SAP2000 to model our load cases. Once we chose our final design, we modeled the bridge in Google SketchUp. We then detailed the model of the bridge, clearly showing where each member would be cut to fit the standard member restrictions of 3' x 4" x 6". We then ordered our steel and had our first workday, during which we cut the steel to the proper lengths and grinded the ends down. Once we finished cutting the steel, the third and fourth workdays were in the student shop in Boelter, where we used the band saw to angle the truss pieces. We reached our goal of cutting all of our steel by Winter Break.

The next stage which will take place over the first few days of Winter Quarter includes building a jig to hold the bridge pieces together to facilitate the welding process. We will then be welding our pieces together and plan on finishing that by 4th week. After that, we will finalize the bridge, adding the necessary aesthetic elements. We will be left with a few weeks to practice construction, leading up to the PSWC conference during which we will compete on March 22.



ENVIRONMENTAL

BY BEN WONG



During Fall quarter, the Environmental team reviewed the rules of the competition and found that we'd require a method of treating hard water and incorporation of a hydraulic jump into our system. We reviewed water treatment practices such as sand filtration and pH adjustment used in industry. We came up with a general treatment system design and built two versions of the hydraulic jump channel.

Though we began research of treatment chemicals, we'll begin testing at the beginning of Winter quarter. Before construction of our system, we'll need to obtain data on our sand filter to determine the optimal amount of material and refine our hydraulic jump design. Finally, we'll experiment with hard water treatment methods, then assemble our system and work on our poster and presentation for competition.

SEISMIC DESIGN

BY JENNIFER HUYNH

We've completed and submitted the design proposal and have been practicing construction techniques throughout Fall quarter. Last year our construction techniques were a contributing factor in the failure of our structure during our third shake table test. This year, we set a higher standard for construction quality and purchased better tools. Members practiced measurement methods, power saw cutting and gluing skills that will be used in the upcoming quarter to build the prototype. During the first week of Winter Break, we were notified that we've been accepted into the national competition in Tennessee in April.

We'll be constructing the prototype for the first half of next quarter, which will be tested on a shake table in a lab in Boelter. After the test and any possible redesign, we will construct the final structure. The national competition will take place April 10-14. We need as much help as we can get building both the prototype and final structures this quarter so watch for work-days to be announced soon.



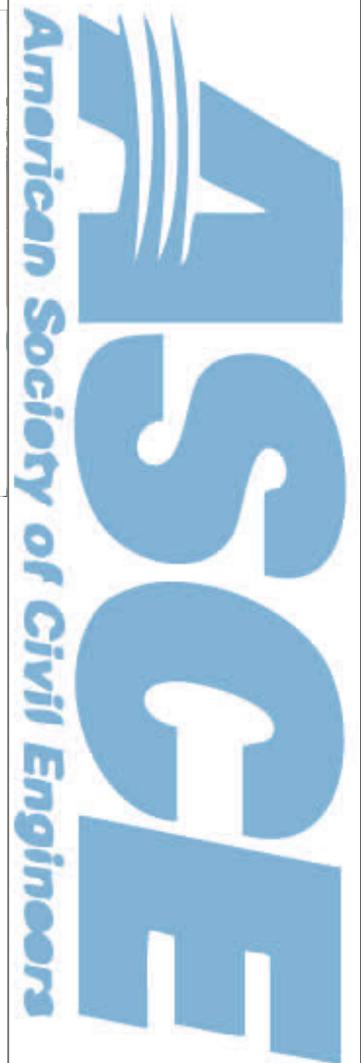
GEOTECHNICAL DESIGN

BY SEAN AHDI

The Geotechnical Design project involves design and construction of a reinforced paper retaining wall to hold nearly 600 pounds of sand. We are judged on the amount of paper used in our reinforcement scheme, the load held, and the amount of time taken to assemble the system. We've tested multiple reinforcement schemes this quarter and have begun work on our report (which will determine if we qualify for the national competition).



During Winter quarter, we'll send the report in and hopefully qualify for the national competition hosted by Cal Poly Pomona. We still have a lot of practice builds ahead of us this quarter, and we'll need all the help we can get cutting strips of reinforcement, construction a new plywood box (our old one is warping), and pouring sand for tests.



CONTACT INFO:

UCLA American Society
of Civil Engineers

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P.O. Box 951593
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We're in the process of creating a new website, but for now keep up to date on our old one at www.ascebruins.org.

Check out the 5th floor Boelter Bulletin Board for announcements and upcoming events.

Membership forms are accepted year round and can be picked up at the new ASCE Lounge in 2638 Life Science Building or at our Boelter bulletin board. Completed forms can be submitted with the \$20 membership fee to any officer. For more information on membership, please contact Wesley Mercado at wtmercado@gmail.com

WINTER LOOKAHEAD

Conference is approaching quickly and will take place during finals week of Winter quarter this year (March 22-24) at Cal Poly Pomona. We know it's unfortunate timing, as it limits the amount of time our projects have to work and in some cases forces those who are interested in going to move their finals schedule around. We have already spoken to multiple professors in the Civil Engineering Department (who historically have had their finals later in the week) regarding the timing of the event and they have agreed to shift finals around.

This is the biggest event of the year for our ASCE chapter, where we compete with 16 other schools in the Pacific Southwest Region. It'll be a massive effort this year to complete our projects and finish preparations for competition with less time than usual (also due to the longer Winter Break). That said, please keep in mind that it's really not too late to get involved in the projects (see below for project contact information or email me at jmaynard90@gmail.com).

Concrete Canoe and Steel Bridge will have a meeting for those interested in jumping into the projects to help out (time and date TBA) and we'll be hosting an all project BBQ to give our members, sponsors, advisors, and faculty a chance to see the progress we've made and what lies ahead of us. The projects will also all be announcing workdays in the near future, so keep an eye out for emails from the Project Managers and their announcements in the weekly emails.

As usual, we will continue to host Infosessions through Winter, as well as our Winter Career fair on January 19th (we currently have about 16 confirmed attendees). Don't miss out on the chance to network with industry representatives and hand your résumé to companies.

Thanks for reading

Justin Maynard
Project Executive, UCLA ASCE

For more information about the projects and other ASCE events, contact:

Concrete Canoe	Samara Al-Jumaily	samaraaj@gmail.com
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Geotechnical Design	Sean Ahdi	seanahdi@gmail.com
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