

ASCE AT UCLA

GEO WALL



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SPONSORSHIP FORM

LETTER FROM THE PRESIDENT

Dear Prospective Sponsor,

It is my pleasure to present the 2021-2022 sponsorship package for UCLA's GeoWall Project. American Society of Civil Engineers at the University of California, Los Angeles, or ASCE at UCLA, offers a diverse range of opportunities for our 300+ members to grow in the field of civil engineering, whether it be in the form of professional development and networking events, hands-on projects, or social mixers for members to expand their circle of friends and mentors. This past year, our chapter's officers worked extremely hard to adapt to the shift to a virtual setting to continue to bridge the gap between students and professionals, and provide members with technical knowledge and skills through our project workdays and various workshops. Our chapter earned recognition at the end of this past year, receiving awards such as the UCLA Engineering Community Connections Award, and the ASCE LA YMF Outstanding Student Chapter Award.

In addition, our chapter was able to place first overall at the Pacific Southwest Conference, where eight of our projects competed against 17 other schools. Every project placed within the top four, with our Concrete Canoe, Environmental Design and Timber-Strong Design Build teams earning first place. Outside of PSWC, our Construction Management Sustainability team placed first, and our Mixed use team placed second at the annual Associated Schools of Construction (ASC) Regions 6&7 Student Competition. Finally, our Seismic Design team competed at the annual Earthquake Engineering Research Institution (EERI) competition, placing fourth overall and receiving the Structural Innovation honors.

Our success is not possible without the generosity from sponsors like yourselves. Your ongoing support allows our projects to purchase necessary materials and supplies to compete at the highest levels and to enhance the experience and education of our student engineers. We wouldn't have been able to get first place at PSWC last year without the support from you all, and we certainly wouldn't have been able to host so many events and have such an extensive network chain without your involvement. As a sponsor, your tax-deductible donation would grant you access to professional events and allow you to receive publicity on our media outlets. In particular, our professional events include career fairs, networking nights, and info sessions, all of which present valuable opportunities for you and your company to recruit UCLA students. Other benefits provided by our chapter are outlined within this sponsorship package.

On behalf of ASCE at UCLA's GeoWall Project, we would like to thank you for your time and consideration in reading this proposal and for your continued support. We are all beyond thrilled to be returning to campus next year and cannot wait to work with you all in-person again. We know that our members will be excited to experience ASCE in-person, and we expect participation at our events to skyrocket. While there will be challenges and uncertainties with this upcoming school year, there is no doubt in my mind that our chapter's officers will continue the success that ASCE upholds in reaching our members and connecting them with the resources, network, and opportunities to grow in the field of civil engineering. Should you have any questions, please do not hesitate to reach out to myself or the project managers.

Best Regards,



Lucas Tang, President
ASCE at UCLA, 2021-2022
lucastang2187@gmail.com

LETTER FROM PROJECT MANAGERS

Dear Prospective Sponsor,

Since 2010, GeoWall has been a thriving link between UCLA undergraduates and the field of geotechnical engineering. As the only undergraduate geotechnical project combining these two, GeoWall has played a vital role in introducing undergraduates to the geotechnical field and fueling their interests in it. By designing and building a miniature mechanically stabilized wall, GeoWall members gain valuable hands-on experience working with geotechnical concepts while improving their problem-solving skills.

For the past decade, we have consistently placed within the top 5 schools at our regional competition and qualified to compete at the national conference. Although nationals was cancelled last year, we earned second place in regionals! However, our journey in past years wouldn't have been so successful without the generous help and support from our sponsors. If it was not for companies such as yours, we would not be able to buy the materials we need or afford to travel to our national competition that proves so enriching for our members.

It would be our privilege to have you as our sponsor as we continue this year's geotechnical project and further motivate our members to explore and challenge themselves. Any support would mean a lot to us! As a sponsor, your company's logo will be displayed on our t-shirt, the GeoWall sandbox, and the ASCE at UCLA website. Additionally, your company will receive networking benefits in the form of free admission to our ASCE student chapter Networking Night and End-of-the-Year Banquet, both of which are great opportunities to interact with UCLA students.

Attached is a detailed sponsorship proposal about what GeoWall does, and why we would appreciate your support next year. Furthermore, we will follow-up via phone within two weeks to answer any questions you may have. Thank you for taking the time to read our proposal. Feel free to contact us at any time if you have any questions or concerns. On behalf of everyone in the GeoWall team, we would like to invite you to join us on this year's geotechnical challenge!

Sincerely,



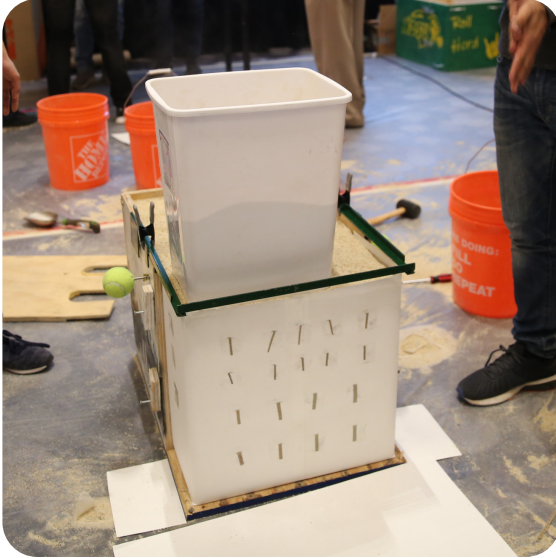
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ABOUT GEOWALL

AT A GLANCE



GeoWall is a competitive project in which we design and build a small-scale, mechanically stabilized earth (MSE) retaining wall out of kraft paper. Our design strives to use the least amount of paper to support the retained soil and design loads. The competition rules — including the type of MSE retaining wall and the construction materials — change from year to year and are meant to challenge students' ability to come up with innovative solutions. Due to the virtual nature of last year, we were tasked with designing a hypothetical wrapped face wall that could withstand 500lb of backfill, a 50lb vertical surcharge, as well as a 20lb static horizontal surcharge load that was loaded in an empty 5 gallon bucket on a loading frame.



COMPETITION

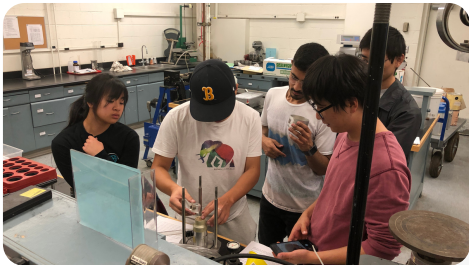
GeoWall attends and competes at two conferences annually: a national conference hosted by the ASCE Geo-Institute during winter quarter and a regional conference hosted by a local ASCE student chapter in the Pacific Southwest region during the spring quarter. This year, the national conference will take place in Charlotte, North Carolina and the regional conference will take place at the University of California, San Diego.

During competition, four team members must fabricate, construct, and load the wall over the course of three timed stages. In the first stage, the facing and the reinforcing strips are fabricated and assembled to create the wall. In the second stage, the wall is placed against the inside of the removable front face of the wooden box, followed by pouring the sand and compacting it. Once this stage is completed, the front face of the box is removed so the wall's performance can be judged. In the third stage, an empty bucket is placed on top of the backfill and filled with 50lbs. After that, a bucket of 20 lbs. of sand is loaded on the two piles placed. In total, the wall must withstand 500 pounds of backfill, 50 lbs. of vertical surcharge, and 20 lbs. of horizontal surcharge with minimal deflection.

TESTING

Over the first few weeks of fall, our primary focus is to perform all necessary laboratory tests. The results allow us to develop a reasonable and informed design and also provide an opportunity to introduce new members to the typical process of soil analysis.

During this time, we perform sieve analysis and triaxial tests, along with specialized tests such as a force accelerometer test, paper tensile strength test, and pull out test. The results of the sieve analysis test are used to confirm the sand used in practice builds fits the grain size distribution given in the competition rules. From the triaxial tests, Mohr's circles are plotted and used to identify the friction angle and cohesion — key information for the design of the retaining wall. Furthermore, the additional tests are used to measure the paper strength and its friction against the sand.



GOALS & IMPACT

Through GeoWall, members are able to experience hands-on learning through events like running lab tests to determine grain size distribution, working in Matlab to analyze data they helped collect, as well as meeting and connecting with industry professionals at the national conference. For many members, GeoWall is a bridge into the geotechnical world, where they can learn to engineer a M.S.E. wall even before their first soil mechanics class.

This year, it is our goal to once again attend the national conference in Charlotte, North Carolina. This enriching opportunity is a great asset to our general members, many of whom otherwise could not afford to attend a national geotechnical conference, and motivates them to further explore the field.

DESIGN

Following the collection and analysis of all relevant data, we begin the design process for the wall. Aided by the numerical computing software Matlab, we use standard MSE retaining wall equations to calculate the dimensions, placement, and geometry of the reinforcing strips. R.S. Pile (a pile analysis software) is also utilized in modeling pile-soil reactions, while RS2 is used to numerically model plane-strain analysis. The initial wall prototype produced from this is typically oversized, but through collaboration with professors, graduate students, and fellow undergraduate students, we are able to refine our design to minimize the weight of the wall and its deflection under a load.

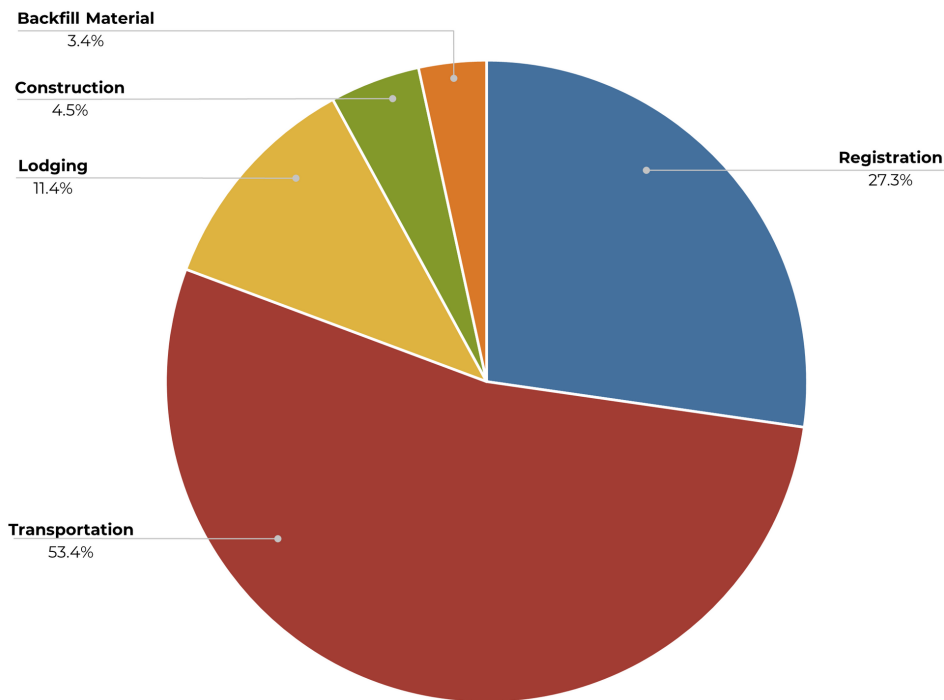
After finalizing the design of our wall, we begin writing the design report. This employs both our Matlab calculations and AutoCAD visualizations of the wall to present the combined results of our testing and design processes. The report is reviewed by our graduate and faculty advisors who provide valuable feedback to our members and help refine their technical writing skills. At the end of the fall quarter, we submit our design report to a national committee of geotechnical engineers from academia as well as industry, who select the top 20 schools to compete at the national conference.



PROJECTED BUDGET

Below is the breakdown of GeoWall's projected budget for the 2021-2022 school year. These values are based off of previous yearly budgets where we operated entirely in-person, as well as our projected expenses given this year's new competition locations and demands. We anticipate participating again in both the regional and national conference. As this year's national competition will take place in Charlotte, North Carolina, funding our travel expenses remains one of our top priorities.

In prior years, we have sent a primary and secondary team to the national conference, and has proved to be exceedingly rewarding for both the competing and non-competing members. Many GeoWall members who attended conference found themselves excited and motivated to further explore their interest in Geotechnical engineering as well as increase their involvement in GeoWall. Thus, we hope to again send two teams so our general members can witness the cumulation of their efforts firsthand, while also furthering their exposure to the geotechnical field.



Description	Qty	Unit Cost	Total Cost
Registration	8	\$ 300	\$ 2,400
Transportation	-	-	\$ 4,700
Airfare	8	\$ 425	\$ 3,400
Uber/Rental Car	1	\$ 500	\$ 500
Shipment of GeoWall Box	2	\$ 400	\$ 800
Lodging	1	\$ 1,000	\$ 1,000
Construction	1	\$ 400	\$ 400
Backfill Material	1	\$ 300	\$ 300
TOTAL			\$ 8,800

HOW TO GET INVOLVED

The passion and heart poured into this student-led project is greatly assisted by the generous contributions from industry and professional organizations like yours. Funds are imperative to purchase essential materials and attend crucial competitions. Every contribution you make will allow more of our members to participate in this unique project.

As we return to a predominantly in-person setting, donations of any kind, including material resources such as sand, are highly appreciated and will heavily impact the success of our project. Additionally, we greatly welcome the involvement of industry professionals who are interested in sharing their experience and advice through workshops and undergraduate mentorship opportunities. If there are any resources you would like to donate, please reach out and let us know.

Full sponsorship packages and benefits are detailed in the following pages of this proposal and contact information can be found on the Donations page.

2021-2022 GEOWALL TEAM



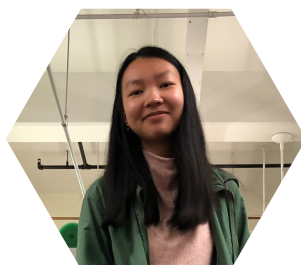
Montserrat Mendez
Co-Project Manager



Mia Verdolin
Co-Project Manager



Esther Foo
Managerial Director



Sabrina Luo
Laboratory Director



Emily Tran
Financial Director

SPONSORSHIP PACKAGES

SPONSORSHIP LEVEL	BRONZE	SILVER	GOLD	PLATINUM
	<\$500	\$500-\$749	\$750-\$999	\$1000+
Company Logo on T-Shirt and Poster	Small Logo	Small Logo	Medium Logo	Large Logo
Advertisement on the ASCE at UCLA Website	X	X	X	X
Advertisement in the ASCE at UCLA Quarterly Newsletter		X	X	X
1 Free Admission Ticket to End-of-the-Year Banquet			X	X
1 Free Admission Ticket to Networking Night				X

Note: Packages consider and account for both monetary and material donations. Material donations will be awarded the package corresponding to their monetary value.

Company Logo on T-Shirt and Poster

Your company logo will be included on the project team's annual 2021-2022 T-Shirt as well as our project posters, if applicable.

Advertisement on the ASCE at UCLA Website

Your company will be publicized on our ASCE at UCLA website.

Advertisement in the ASCE at UCLA Quarterly Newsletter

Your company and your respective sponsorship level will be publicized on the back cover of our widely distributed quarterly ASCE at UCLA newsletter.

1 Free Admission Ticket to End-of-the-Year Banquet

A representative from your company will receive free admission to our annual ASCE at UCLA End-of-the-Year Banquet. Admission includes event registration, a lovely three-course meal, and an evening of celebrating ASCE at UCLA's yearlong achievements while networking with students and professionals.

1 Free Admission Ticket to Each Networking Night

A representative from your company will receive free admission to our Fall and Winter Networking Nights. Admission includes event registration, hors d'oeuvres, and a night of networking and recruitment opportunities. Inquiries can be directed towards our Networking Night Coordinator, Pooya Rezai at prezai@ucla.edu.

SPONSORSHIP BENEFITS

In addition to organization promotion and the aforementioned advantages of supporting our projects, a partnership with Geowall implies a relationship with ASCE at UCLA, which provides the following opportunities and benefits:

Tax Deductions

All donations and contributions to the UCLA Henry Samueli School of Engineering and Applied Sciences are fully tax-deductible for federal income tax purposes and are subject to any limitations placed on charitable gifts. Additional fund disclosures and information regarding donor privacy can be found here:

<https://www.uclafoundation.org/finances.aspx?content=disclosures>.

Information regarding UCLA tax I.D. numbers, tax exemption letters, and other frequently requested documents can be found here:

<https://www.uclafoundation.org/resources.aspx?content=tools>.

ASCE at UCLA Career Fairs

Fall: **October 28, 2021**

Winter: **January 27, 2022**

Meet with bright engineers from one of the top engineering schools in the nation at our biannual ASCE at UCLA Career Fairs – events you will not want to miss in the Fall and Winter! Inquiries can be directed to our Career Fair Coordinator Cassidi Harada at cassidi.harada@gmail.com.

Student Activities

The goal of our projects and competitions is to enhance the education our student members receive through practical applications of their technical knowledge. UCLA's Civil and Environmental engineers-in-training are multifaceted students, each with the unwavering desire to further their education with the extracurricular experiences provided by ASCE at UCLA.

To showcase the talents of our students, ASCE at UCLA compiles an annual resume book of its leaders and student members for reference and for consideration in internship and job openings by organizations like yours. It is available upon request for purchase. Inquiries can be directed to our Career Fair Coordinator Cassidi Harada at cassidi.harada@gmail.com.

DONATIONS

If you are interested in becoming a sponsor, please fill out the ASCE at UCLA Sponsorship Form below and send a copy to our [Treasurer Tiffany Choi at treasurer.uclaasce@gmail.com](mailto:treasurer.uclaasce@gmail.com) as well as to [Montserrat Mendez at monse613@g.ucla.edu](mailto:monse613@g.ucla.edu) or [Mia Verdolin at mianutella@ucla.edu](mailto:mianutella@ucla.edu). Depending on the donation method, please refer to the Giving Site listed below for online credit card payments and return checks to the mailing address listed below.

We will gladly accept any form of donations and contributions, whether it may be a monetary donation, a material donation, or a service donation (i.e. professional workshops or advising). Please note that all donations and contributions are non-refundable. If you have any questions regarding the information included in this packet, please contact Montserrat Mendez at monse613@g.ucla.edu or Mia Verdolin at mianutella@ucla.edu and/or our Project Executive Alexis Bui at Alexis.bui.123@gmail.com.

FROM THE 2021-2022 GEOWALL PM TEAM - THANK YOU!



MONTSERRAT MENDEZ

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(323)386-1335



MIA VERDOLIN

GeoWall Co-Project Manager
mianutella@ucla.edu
(619)799-8801

ASCE AT UCLA SPONSORSHIP FORM

Company Name: _____

Address: _____

Phone: (_____) _____

Email: _____

☐ Yes! I would like the _____ package by generously donating a total amount of \$_____. I would like this to be distributed as follows (please specify amounts in lines below):

<input type="checkbox"/> ASCE at UCLA General Fund	<input type="checkbox"/> Seismic Design
<input type="checkbox"/> Concrete Canoe	<input type="checkbox"/> Seismic Outreach
<input type="checkbox"/> Construction Management (ASC 67)	<input type="checkbox"/> Steel Bridge
<input type="checkbox"/> Engineering X	<input type="checkbox"/> Surveying
<input type="checkbox"/> Environmental Design	<input type="checkbox"/> Timber-Strong Design Build
<input checked="" type="checkbox"/> GeoWall	<input type="checkbox"/> Transportation Design
<input type="checkbox"/> Navajo Water	

☐ Yes! We would like to donate the following products/supplies with a value of \$_____

Total Amount Enclosed: \$_____

Donation Information:

☐ Credit/Debit Card

Please visit our Giving Site: https://giving.ucla.edu/campaign/donate.aspx_Fund=64473c&sitenum=8
(In the "Donor's Information" section, please check the box that says "I AM MAKING THIS GIFT AS A PROXY FOR MY ORGANIZATION/ COMPANY, WHICH SHOULD BE RECOGNIZED AS THE LEGAL DONOR" and enter the company name in the text field so tax credit is properly assigned.)

☐ Check

Please make checks payable to: **UC Regents**

Please address memo to: **Fund Name: ASCE GeoWall**

FAU: 402590-7L-41271

Please return checks: **The UCLA Foundation**

PO Box 7145

Pasadena, CA 91109-9903

THANK YOU FOR SUPPORTING ASCE at UCLA!