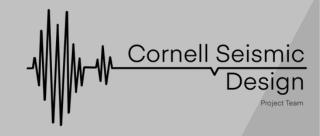
#### **CornellEngineering**

Civil and Environmental Engineering



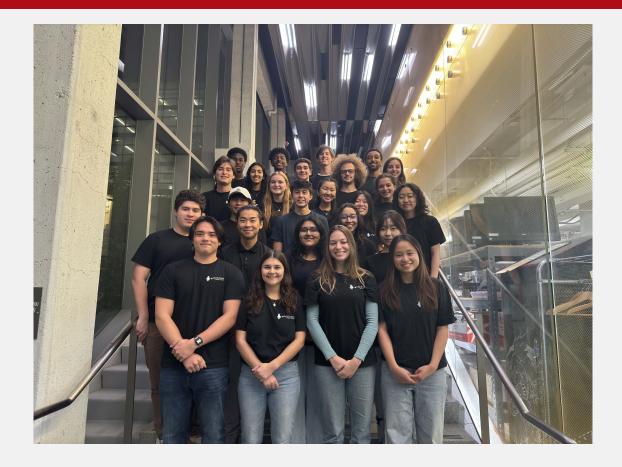
## **CORNELL SEISMIC DESIGN**



### SPONSORSHIP PACKET

2024-2025

### THE TEAM



2023-2024 Team Photo

We are a student-led project team of 30 undergraduates in the Cornell University College of Engineering. Our team designs and constructs a 5-ft-tall balsa wood structure to compete in the annual Seismic Design Competition hosted by the Earthquake Engineering Research Institute. Thanks to our donors' support, we have been awarded the Egor Popov Award for Structural Innovation and in the 2024 Seismic Design Competition placed 1st overall out of 39 teams! Our team offers a unique opportunity for students interested in all engineering disciplines, especially those focused on construction, structural design, architecture, and seismology, to experience the process of bringing a project from an abstract thought to a tangible product. Through our work, we not only aim to create innovative structural solutions to challenging design problems, but also encourage team members to develop strong leadership and communication skills!

## **E-BOARD**

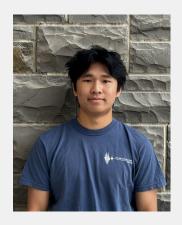


Youngjin Yang '27 & Andrew Sandberg '27



Co-Team Leads

Ivan Hubka '25 & Natalie Wolf '25



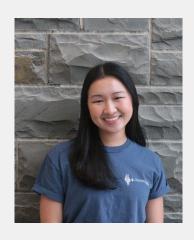
Design Leads



Architecture Lead Nathan Gach '25



Seismology Lead Hayden Flynn '26



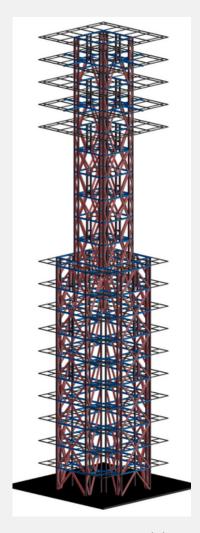
PR Lead Jodi Hahn '26



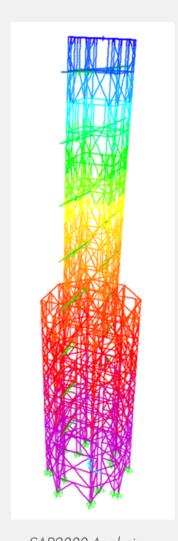
**Business Lead** Matthew Bulger '26

## **OUR PROCESS**

Our initial design work begins on AutoCAD, creating elevation and plan views of our structural design. We then model the design in SAP2000 to determine the building's response to shaking, after which we begin construction.



3D AutoCAD Model



SAP2000 Analysis



Architectural Rendering

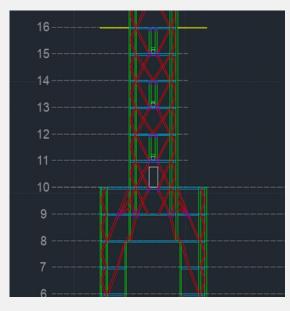
Concurrently, we produce an original rendering of the façade using Rhino, Grasshopper, and Lumion to showcase how our model fits within the existing urban landscape of each year's competition location. This rendering allows the team to transform a wooden model into a realistic masterpiece. Once the tower is constructed we then test it on a shake table with a simulated earthquake and measure the building's resonance, roof acceleration, and roof displacement.

### WHY DONATE?

#### **DESIGN**

Your support will enable us to make the necessary hardware and software upgrades on our current shake table. Furthermore, your donation will also allow us to have unlimited access to software such as SAP2000 and Rhino, which are critical parts of our success in future competitions.





#### BUILD

The construction of our building requires materials and tools such as balsa wood, wood glue, 3D printing materials, and measuring equipment. Donations will allow our team to purchase high-quality materials and tools that will ensure the sound construction of our model.

#### COMPETE

A significant portion of your donation will go towards funding the team at competition. Competition expenses include, but are not limited to, plane tickets, hotel reservations, shipping the tower, and meals.



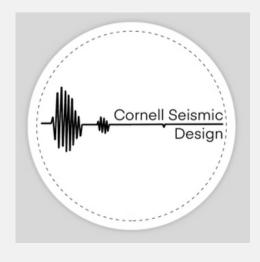
# SPONSORSHIP LEVELS

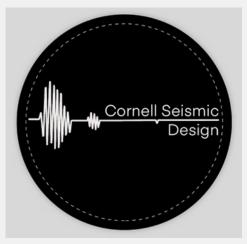
Benefit	Bronze	Silver	Gold
Donation	\$1,000	\$2,500	\$5,000
Featured on <u>Website</u>	x	x	x
Shoutout on <u>LinkedIn</u>	x	x	x
Logo featured on Team T- shirts (see next page)	x	x	x
Set of Cornell Seismic Design Stickers (see next page)	x	×	x
Team Members' Resume Packet		x	x
Logo Featured on <u>Competition Poster</u>			x
Campus Marketing (Annual Project Team Fest, CSD Alumni Newsletter)			x

## SPONSORSHIP LEVELS









## THANK YOU!

We are incredibly grateful for everything our sponsors have allowed us to achieve in the past years, and we look forward to continuing to grow and build our relationship. Thank you for your consideration!

Best Regards,

Cornell Seismic Design Team



#### Contact Us!

Email: seismicdesign@cornell.edu

LinkedIn: https://www.linkedin.com/company/70894898

Instagram: https://www.instagram.com/cornellseismicdesign/

Team Website: http://cornellseismicdesign.com

## SPONSORSHIP RESPONSE FORM

Thank you for partnering with Cornell Seismic Design. Please fill out and return this form by email. All questions can be forwarded to cornellseismicdesignteam@gmail.com

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