

ENGINEERING OPEN HOUSE

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN



ASPIRE TO INSPIRE

April 5th-6th 2024

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For More Information

Visitor's Booth

Have any Questions? Need another visitor's guide? Exhibit suggestions? Find our volunteers to answer your questions in the Campus Instructional Facility (CIF), on Graziano Plaza, outside Sidney Lu Mechanical Engineering Building, outside Loomis Laboratory, or outside Electrical and Computer Engineering Building (ECEB).

Food

Watch out for our students' favorite food trucks on Springfield Avenue, including:

- Dave's Dogs
- Pastamania
- Kona Ice
- Travelin' Tom's Coffee
- La Paloma
- Juanito's Tacos
- Jurassic Grill
- FOUR
- Burrito King

Stango Cuisine, El Oasis, and Brien's Bistro will also be available by the Stock Pavilion.

Shirt Colors:

Have a question? Check here to see who to ask!

Volunteers - Gold

Exhibitors - Sky

Visitors - Indigo Blue

Internal - White

Sponsors - Teal

Judges - Sand

HSDC - Light Pink

MSDC - Safety Pink

Start-Up Showcase - Violet

In Case of an Emergency

Severe Weather

Please check our website in case of severe weather to see where exhibits will be held.

<https://eohillinois.org>

Missing Child

In the case of a lost/missing child: Notify the visitor's booth nearest to you that you have custody of a lost child. A volunteer will bring the lost child to the visitor's booth in CIF, notify 911, and meet the reporting person and the lost child there. This is where a parent/guardian can meet the child.

Medical Concerns

In case of injury, immediately notify any nearby volunteer and go to the EMS tent on Graziano Plaza, in between Engineering Hall and Everitt Laboratory.

Local Hospitals

Carle Foundation Hospital
Presence Covenant Medical Center

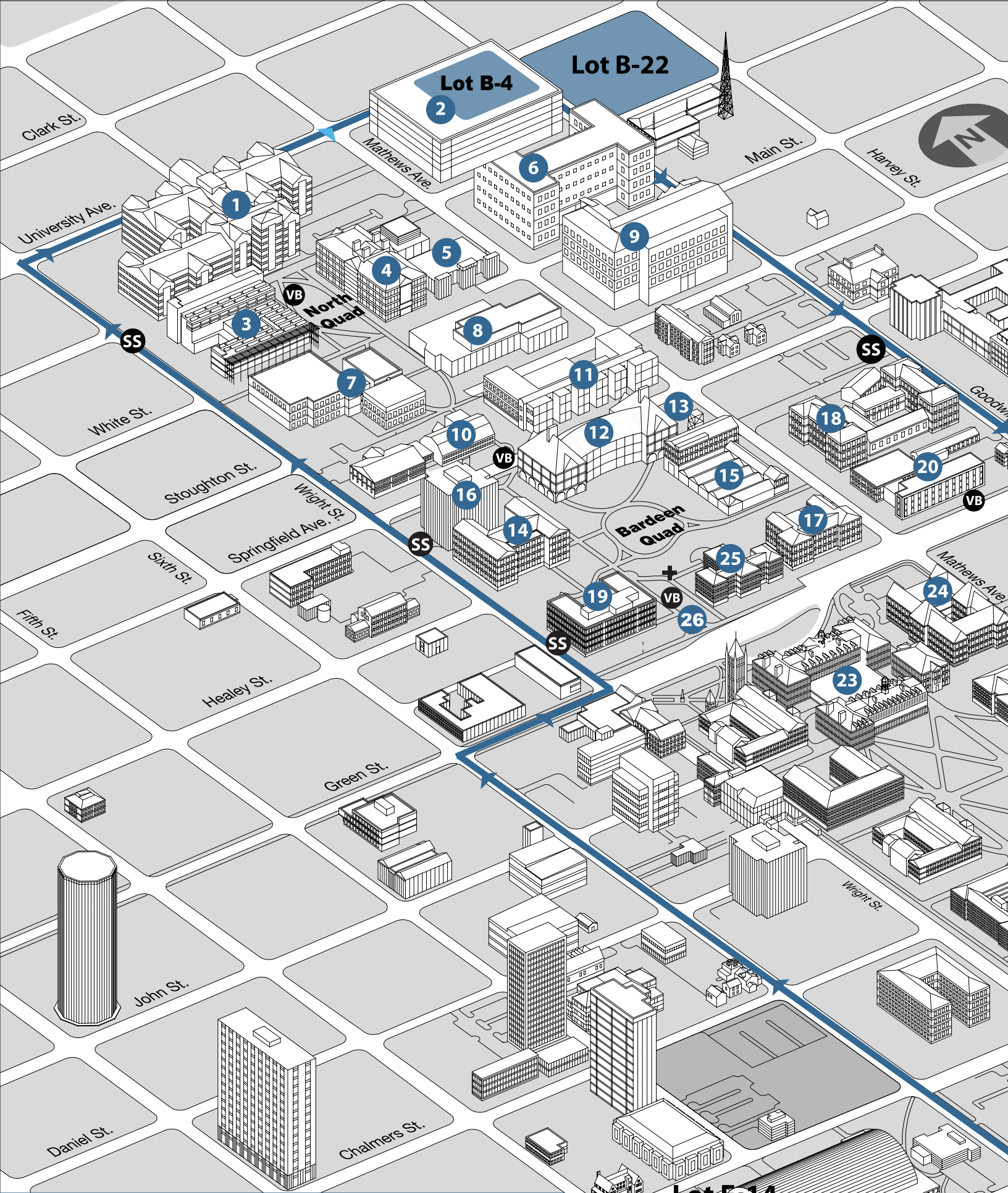
Lost and Found

Missing items can be brought to our lost and found at the Visitor's Booth in CIF between 9 am and 5 pm on Friday and Saturday or at the Engineering Council Office (Engineering Hall 103C) any other time.

Other Emergencies

Approach any EOH volunteer in the Visitor's Booth in the Campus Instructional Facility.

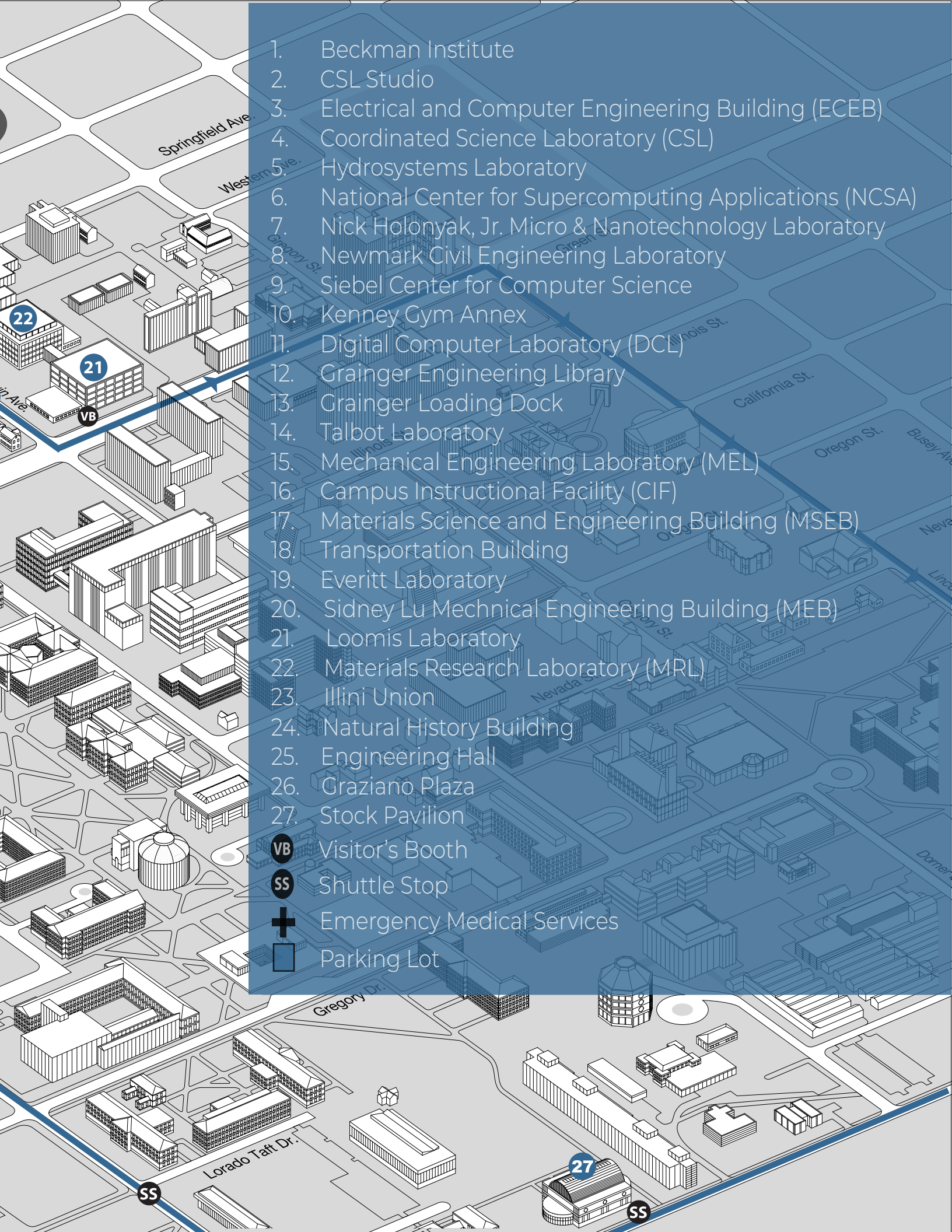
All minors must be accompanied by a parent or guardian!



EOH 2024 Map

Lot E-14





1. Beckman Institute
 2. CSL Studio
 3. Electrical and Computer Engineering Building (ECEB)
 4. Coordinated Science Laboratory (CSL)
 5. Hydrosystems Laboratory
 6. National Center for Supercomputing Applications (NCSA)
 7. Nick Holonyak, Jr. Micro & Nanotechnology Laboratory
 8. Newmark Civil Engineering Laboratory
 9. Siebel Center for Computer Science
 10. Kenney Gym Annex
 11. Digital Computer Laboratory (DCL)
 12. Grainger Engineering Library
 13. Grainger Loading Dock
 14. Talbot Laboratory
 15. Mechanical Engineering Laboratory (MEL)
 16. Campus Instructional Facility (CIF)
 17. Materials Science and Engineering Building (MSEB)
 18. Transportation Building
 19. Everitt Laboratory
 20. Sidney Lu Mechanical Engineering Building (MEB)
 21. Loomis Laboratory
 22. Materials Research Laboratory (MRL)
 23. Illini Union
 24. Natural History Building
 25. Engineering Hall
 26. Graziano Plaza
 27. Stock Pavilion
- VB** Visitor's Booth
SS Shuttle Stop
+ Emergency Medical Services
■ Parking Lot

PARKING AND SHUTTLE INFORMATION

Parking

On Friday, visitors can park in these lots:

Lot E-14: Near State-Farm center. Can be used for all-day parking on Friday April 5th. The shuttle will pick people up from E-14 and send them to the Bardeen Quad/ other exhibits.

Lot B-22 and Lot B-4: North campus, can also be used for all day parking April 5th. There is no shuttle stop here, so attendees will have to walk to Bardeen Quad (closest stop would be ECEB or ESPL).

On Saturday, visitors can park in:

B1- Springfield Avenue between Mathews and Goodwin, B17- Harvey Street between Clark and Main, C09- Chalmers and Sixth, D09- Illinois and Lincoln, E14- First Street and Kirby, F23- Lincoln Avenue and Florida, F28- Peabody and Dorner Drive, B4- University and Mathews, F29- Gregory and Dorner Drive.

Pick-up and Drop-off

If you have a field-trip/bus that will drop-off passengers at the beginning of EOH and pick up at the end of the day, you cannot use parking lot B1 as in previous years for Friday April 5, 2024. To make drop-off/pick-up easier we are allowing buses to drop-off and pick-up in S. Mathews Ave between Green St and Springfield Ave. This street and meters will be reserved for EOH. Mathews is one-way. As such, we recommend all buses to come in from W. Green St, continue east, and turn left into Mathews. The barriers will be moved to allow the bus/field-trip to enter. Once in the street, continue down and pull into a metered parking space. Meters will be available on both sides of the street. Allow time for drop-off. EOH volunteers and organizers will be present during times of peak activity to assist with feeding out of the street. Feed out of Mathews St and continue to lot B-22 (further North near 1201 W. University Ave) or to Lot-E14 (near State Farm Center) where buses can park for the remainder of the day and any EOH participants can take a shuttle to the Engineering Open House. For pick-up, a similar procedure will be followed. Buses will turn left into Mathews Ave and from furthest in, park in the available metered space on the street. Conduct pick-up of passengers and follow volunteer/orders with regards to feeding out of the street to ensure the street does not get too congested.

Street Closures

W. Springfield Ave (Wright to Mathews) and S. Mathews St (Green to Springfield) will be closed. Only sponsors, committee members, FNS vehicles, emergency vehicles, and field trip buses will be allowed in. The road will be closed from 7 AM to 6 PM.

Shuttle Information

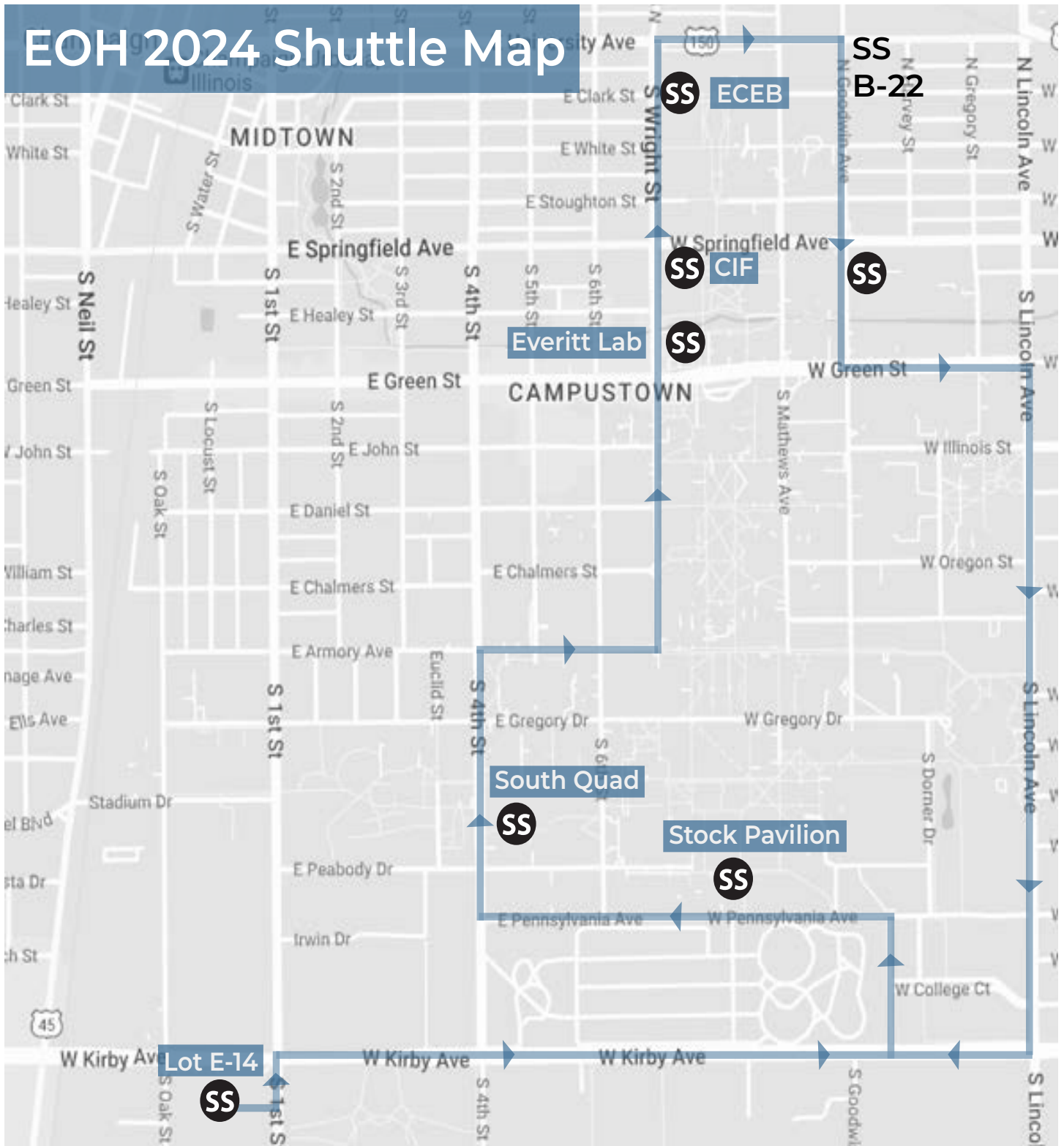
The shuttle will run from 8:00 AM to 5:30 PM Friday and Saturday. Shuttle stops will be:

- Lot E-14, Stock Pavilion
- S 6th St (close to South Quad)
- Everitt Laboratory
- Campus Instructional Facility (CIF)
- Electrical and Computer Engineering (ECEB)
- Lot B-22**
- Engineering Students Projects Laboratory (ESPL) Parking Lot and then will return to E-14 and repeat.

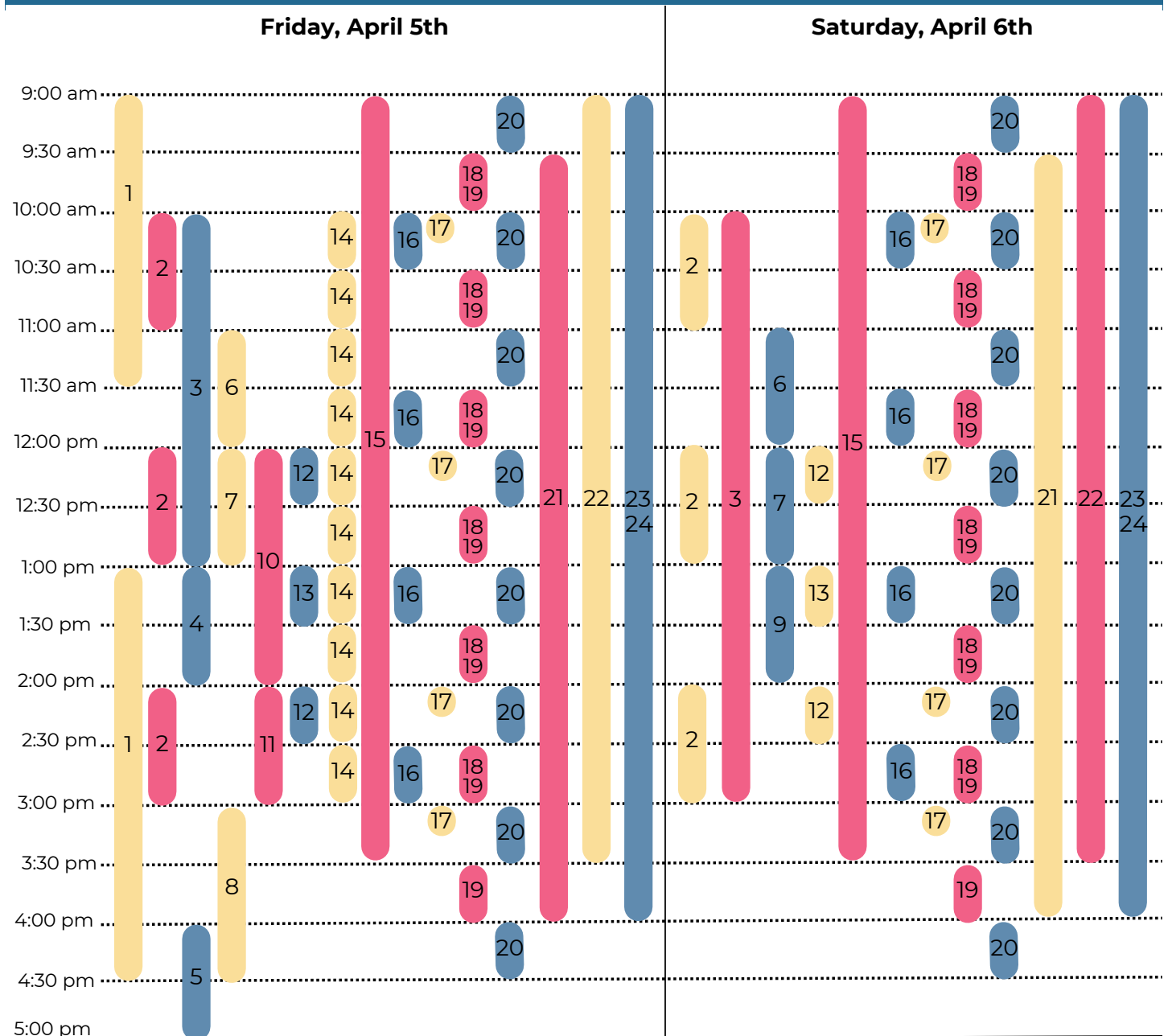
**this stop is not listed on the printed visitor's guide and was added recently, but is marked on the map on the right with an SS.

PARKING AND SHUTTLE INFORMATION

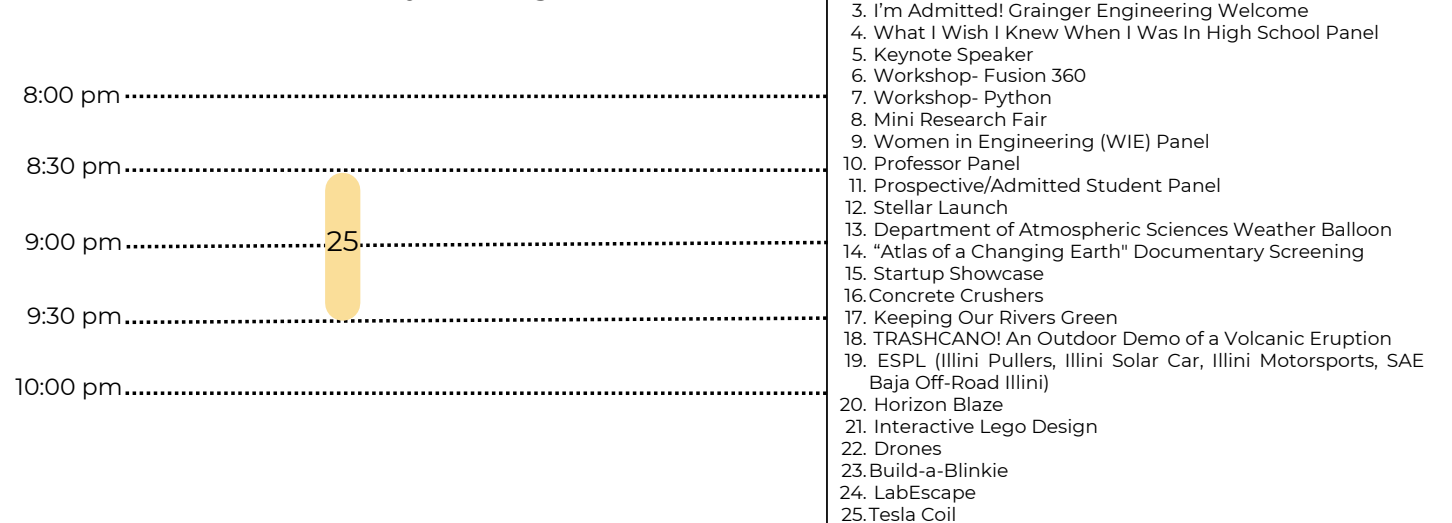
EOH 2024 Shuttle Map



TIMELINE OF SPECIAL EVENTS



Friday Evening



1. Robobrawl
2. Physics Van
3. I'm Admitted! Grainger Engineering Welcome
4. What I Wish I Knew When I Was In High School Panel
5. Keynote Speaker
6. Workshop- Fusion 360
7. Workshop- Python
8. Mini Research Fair
9. Women in Engineering (WIE) Panel
10. Professor Panel
11. Prospective/Admitted Student Panel
12. Stellar Launch
13. Department of Atmospheric Sciences Weather Balloon
14. "Atlas of a Changing Earth" Documentary Screening
15. Startup Showcase
16. Concrete Crushers
17. Keeping Our Rivers Green
18. TRASHCANO! An Outdoor Demo of a Volcanic Eruption
19. ESPL (Illini Pullers, Illini Solar Car, Illini Motorsports, SAE Baja Off-Road Illini)
20. Horizon Blaze
21. Interactive Lego Design
22. Drones
23. Build-a-Blinkie
24. LabEscape
25. Tesla Coil

Keynote Speaker

CIF Monumental Steps [Friday 4-5 pm](#)

Yu Pan, the first software engineer at YouTube, a co-founder of PayPal, and a co-founder of the AI tool Mindy, is here at EOH to share his experience with all of us! As a UIUC alumni who started out as a computer science undergraduate and grew into an incredible engineer, Pan has a story worth hearing.

Tesla Coil

Bardeen Quad [Friday 8:30-9:30 pm](#)

Just as dark falls, visit the Bardeen Quad to see an electrifying display of light and sound.

“Atlas of a Changing Earth” Documentary Screening

NCSA Auditorium [Friday every 30 minutes from 10 am- 4pm, the last show is 2:30 pm](#)

“Atlas of a Changing Earth” is a documentary co-produced by NCSA about the dynamic processes causing coastal glaciers to melt. It’s the story of how a revolution in the making of maps is shedding new light on our planet’s evolution in the wake of rising global temperatures.

Build-a-Blinkie=

CIF 0035 [Friday and Saturday 9 am- 4 pm](#)

Build-a-Blinkie is an organization dedicated to the teaching of STEM. We are teaching people to solder one blinkie at a time. Come check out this interactive activity and take home your own soldered blinkie!

Concrete Crushers

Talbot 15 (basement) [Friday and Saturday: 10am, 11:30am, 1pm, 2:30pm \(30 minutes long\)](#)

Watch our two-story tall machine create enough force to crush a concrete pillar!

Department of Atmospheric Sciences Weather Balloon

Bardeen Quad [Friday and Saturday 1-1:30 pm](#)

Do you want to understand the power of mother nature? If so, come visit our exhibit to get experience with cloud identification, how atmospheric measurements are taken, and make tiny tornadoes!

Drones

Talbot Drone Lab 103/104 [Friday and Saturday: 9 am- 4 pm](#)

Our lab will be open all day for walkthroughs and drone demonstrations, come check out our drones and watch them fly!

ESPL Demo

Parking Lot B21 [Friday and Saturday: 9:30 am, 10:30 am, 11:30 am, 1:20 am, 2:30 pm, 3:30 pm \(30 minutes long\).](#)

[Additional demo at 12:30 pm on Friday.](#)

This EOH showcase track is for vehicles built and designed by engineering student teams for collegiate competitions: two formula racecars (one electric powered and one gas powered), a Baja off-road ATV, a 3-wheeled super-mileage vehicle, an electric commuter concept car, a tractor-pull, and a solar-powered vehicle. This is a great opportunity for action pictures and for the public to talk to team members between demonstration events.

Horizon Blaze

Boneyard Creek [Friday and Saturday: 9 am, 10 am, 11 am, 12 pm, 1 pm, 2 pm, 3 pm, 4 pm \(30 minutes long\)](#)

Watch as a configured rocket is launched across Boneyard Creek at blazing speed! Learn more about rocket motors and propulsion systems as its demonstrated horizontally.

I’m Admitted! Grainger Engineering Welcome

CIF 1035 [Friday 10 am- 3 pm, Saturday 10 am- 1 pm](#)

Congratulations to our incoming new first-year and transfer students! Come tell us what you’re excited about at Illinois and receive a limited edition gift while supplies last. All students who have accepted or are still deciding on their offer of admission to Grainger are invited to stop by the Campus Instructional Facility (CIF) Room 1035 and learn about future opportunities, meet faculty and staff, and take a commemorative photo.

Interactive Lego Design

CIF 2036 [Friday and Saturday 9:30 am- 4 pm](#)

The Lego Design Lab is a place designed for students of all ages to engage in interactive lego building and coding. There will be 3 stations: Robot Maze, Machine Building, and Spider Obstacles.

Keeping Our Rivers Green

Boneyard Creek [Friday and Saturday: 10 am, 12 pm, 2 pm, 3 pm](#)

To keep our rivers green, we will be dyeing them green! We will inject a small amount of dye in our Boneyard Creek to learn how pollutants travel in rivers. With this knowledge we can avoid the risks that pollution brings to our rivers.

SPECIAL EVENTS CONT

LabEscape

DCL 1262 [Scan the QR code on the right to view times and sign up!](#)
World-renowned quantum physicist Professor Alberta Pauline Schrodberg is quarantining and desperately needs your help - the fate and security of the entire world hang in the balance. You'll have to search her lab, solve mind-blowing puzzles to reveal clues, and hopefully find a way to complete your mission! Reservations required.



Mini Research Fair

CIF 3025 [Friday 3-4:30pm](#)

Some professors will have posters with their research, and undergraduates will be able to talk to them about the research they are doing. They also might have monitors with their research.

Physics Van

Loomis Laboratory 141 [Friday and Saturday: 10-11 am, 12-1 pm, 2-3 pm \(1 hour long\)](#)
A live show for all ages, turning bananas into hammers, creating explosions, and more!

Professor Panel

CIF 2018 [Friday 12-2 pm](#)

Professors will talk about the research they do and how undergraduates can get involved.

Prospective/Admitted Student Panel

CIF 2035 [Friday 2-3 pm](#)

Want to get a feel for life on campus as a Grainger engineering student? Come listen to students talk about their first hand experience. They will be discussing everything from favorite classes to their favorite way to destress on campus!

Robobrawl

Stock Pavilion [Friday 9-11:30 am, 1-4:30 pm](#)

The Robobrawl competition consists of 30-pound and 3D printed 1-lb combat robots from different universities and private teams fighting one-on-one matches in a double elimination bracket with the goal of destroying the opponent bot. It's open to all who wish to view.

Startup Showcase

CIF Monumental Steps [Friday and Saturday 9 am- 3:30 pm, Awards Ceremony at 4 pm on Saturday](#)
The Startup Showcase is dedicated to celebrating student entrepreneurs! Come see what our inventive Illinois students have been working on at their booths and experience demos, giveaways, and much more!

Stellar Launch

South Quad [Friday and Saturday: 11 am, 1 pm \(30 minutes long\)](#)

Join the Illinois Space Society in launching a model rocket to roughly 200 feet on the South Quad! Follow as it goes through the stages of high power rocketry of ignition, flight, and landing under a parachute!

TRASHCANO! An Outdoor Demo of a Volcanic Eruption

Bardeen Quad [Friday and Saturday: 9:30 am, 10:30 am, 11: 30 am, 12:30 pm, 1:30 pm, 2:30 pm \(25 minutes long\)](#)

This outdoor demonstration replicates the dynamics of a volcanic eruption, mimicking the processes responsible for such events. It offers students a means to grasp eruptive phenomena and apply fundamental principles of physics. This hands-on activity is tailored for students, employing common materials like a trash can, soda bottles, and liquid nitrogen, making it accessible and engaging for educational purposes.

What I Wish I Knew When I Was In High School Panel

CIF 2035 [Friday 1-2 pm](#)

Listen in on advice from current college students on what activities helped them discover their passion and any tips they have for prospective students!

Women in Engineering Panel

CIF 2035 [Saturday 1-2 pm](#)

Check out some of our women engineering students and professors talk about their experiences in their respective fields!

Workshop - Fusion 360

E-Hall Computer Labs [Friday and Saturday: 11 am- 12 pm](#)

Learn design skills from UIUC's engineering students themselves! Join us for a workshop in Fusion 360 at the Engineering Hall computer lab.

Workshop - Python

E-Hall Computer Labs [Friday and Saturday: 12-1 pm](#)

Join us for a workshop in Python at the Engineering Hall computer lab.

Welcome to the 102nd Engineering Open House (EOH) at the University of Illinois at Urbana, Champaign. We are very excited to welcome our field trips, community members, students, and faculty coming from various places. EOH is the world's largest student-run STEM fair, where students and faculty members from UIUC present the amazing work they have been doing. This year we will be expanding our projects by having even more special events, and events that have never been seen at EOH or even UIUC before.

We hope our visitors are able to explore the STEM (Science, Technology, Engineering, and Math) fields, and learn more about the amazing work being done at the Grainger College of Engineering. This year we welcome 200+ exhibits and 10+ special events, ranging from rocket launches to car races to environmental awareness. Every exhibit at EOH showcases the immense effort and impact that is happening in all the different STEM fields. Our exhibits highlight the prestige of the Grainger College of Engineering and our students. We hope while you are exploring EOH you **Aspire to Inspire**.

We would like to thank all of our student and faculty-led exhibits, volunteers, corporate sponsors, judges, alumni, faculty, and Grainger administration. EOH wouldn't be what it is without your help, imagination and resilience and dedication. Furthermore, our 30 Directors on our Central Committee are instrumental to EOH. With EOH being a fully student-run event, we depend heavily on our Directors to execute and plan each event while being full time students. We are forever grateful for the time and effort they have put into the event. We thank you all for attending EOH and hope you will be able to gain insight into what engineering is, and **Aspire to Inspire** you to pursue it in the future.

Rohini Ramesh & Paymon Sadat
Co-Directors, Engineering Open House 2024



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Biodiesel for the Future[Illinois Biodiesel Initiative](#)

Lamps, Bubbles, Go-Karts: Explore Biodiesel!

Bio-Fuel
Chemistry
Sustainable**ChemE on Mars**[Alpha Chi Sigma](#)

Explore the innovative solutions that propel us into the final frontier, from sustainable life support systems to extracting resources on distant planets. We will be simulating the extraction of water on Mars and how this can further support us for journeys to the stars.

Chemistry
Sustainable
Water**Classic Arcade Cabinet**[Triangle Fraternity](#)

Come stop by and play your favorite arcade games!

Programming
Kid-Friendly
Electronics**Engineering Ambassadors: Robotics**[Engineering Ambassadors](#)

See how engineering is with everyone through the intersection of disciplines.

Robotics
Kid-Friendly
Design Team**Engineers in Action Bridge Program**[Engineers in Action Bridge Program](#)

Dig into the Fun: Where Sand, Science, and Smiles Collide! Unleash Your Inner Civil Engineer at Engineers in Action Bridge Program's Geotechnical Playground!

Construction
Kid-Friendly
Physics**Gamebuilders Games**[ACM Gamebuilders](#)

Trick or treat among ghosts, cook delicious foods with friends, escaping a labyrinth... Come play the games we've made!

Art & Design
Programming
Design Team**Horizon Blaze**[Illinois Space Society](#)

Watch as a configured rocket is launched across Boneyard Creek at blazing speed! Learn more about rocket motors and propulsion systems as its demonstrated horizontally.

Outer-Space
Combustable
Physics**Instant Cold Brew Machine**[ECE 445](#)

No more waiting 12-24 hours when making cold brew! Come check out our "Instant Cold Brew Machine" that brews cold brew coffee from grounds to cup in less than 5 minutes. Harness the power of vacuum pressure to make and taste the sweet, less acidic flavor of cold brew coffee in the same amount of time it takes to make traditional hot coffee!

Food
Electronics
Future-Oriented**Keeping Our Rivers Green**[Water Resources](#)

To keep our rivers green, we will be dyeing them green! We will inject a small amount of dye in our Boneyard Creek to learn how pollutants travel in rivers. With this knowledge we can avoid the risks that pollution brings to our rivers.

Environment
Water**Medicinal Analysis of Natural Compounds**[Biomedical Engineering Society \(BMES\)](#)

Our exhibit showcases natural compounds like various plants and fungi and explains why these ingredients are used as natural treatments for numerous illnesses. We'll also have a microscope for visitors to use so they get to see the up-close molecular visuals for themselves!

Biology
Health & Medicine
Molecular Scale**Powering a Rocket Engine**[Liquid Rocketry at Illinois](#)

Learn to power and control a rocket engine.

Outer-Space
Mechanics
Physics

Playing with Chemical Safety

[Division of Research Safety](#)

Can you control chemical exposures? Try to remove a “toxic chemical” from the air to protect people and the environment. Learn how to measure trace levels of environmental contaminants and see how we find 1 in a million. See how safety professionals rely on engineering controls to reduce chemical concentrations by controlling the way air moves. Challenge yourself by removing a pair of gloves without touching a toxic chemical.

Chemistry
Environment
Research

Radio Hide & Seek

[ECE 395](#)

Get the chance to play hide and seek while learning about the amazing world of radios!

Electronics
Physics
Programming

Rocket Launch

[Women in Aerospace \(WIA\)](#)

Rocket Launches with WIA!

Outer-Space
Kid-Friendly
Good for older
students
Robotics
Health & Medicine
Biology

Soft Robotic Flow Manipulator with Biomedical Applications

[iMADE \(Illinois Medical Advancements through Design and Engineering\)](#)

Soft Robotics: Robots made from balloons!

Health & Medicine
Biology

StormX

[American Society of Mechanical Engineers Special Projects](#)

Come learn how storm surge barriers are saving the world by participating in a simulation of a lockdown procedure operated by you!

Mechanics
Weather
Kid-Friendly

Tesla Coil Guitar Amp

[ECE 445](#)

Watch ECE students David and Griffin demonstrate their tesla coil guitar amp! This device uses a tesla coil to play music with the sparks it generates. The tesla coil takes live input from an electric guitar to control the notes played, creating exciting audio and dazzling visual effects!

Electronics
Physics
Music

The Institute for Scientific Progress, Innovation, Research, and Edu-Training

[The Institute for Scientific Progress, Innovation, Research, and Edu-Training](#)

InSPIRE is a sustainability engineering RSO dedicated to promoting a broader understanding of renewable energy.

Sustainable
Environment
Good for older
students

The Science of Cotton Candy

[Material Advantage](#)

You’ve seen it at fairs, carnivals, and more, but what exactly is cotton candy, and how is it made? Stop by our booth to watch cotton candy being spun, learn how it’s similar to fiber glass, and even take some cotton candy home for yourself!

Food
Chemistry
Kid-Friendly

TRASHCANO! An Outdoor Demo of a Volcanic Eruption

[UIUC Volcano Group](#)

This outdoor demonstration replicates the dynamics of a volcanic eruption, mimicking the processes responsible for such events. It offers students a means to grasp eruptive phenomena and apply fundamental principles of physics. This hands-on activity is tailored for students, employing common materials like a trash can, soda bottles, and liquid nitrogen, making it accessible and engaging for educational purposes.

Volcano
Eruption
Geology
Physics

Tree-jumping robotic squirrel

[Individual](#)

Remote control a robotic squirrel that jumps and climbs trees!

Robotics
Mechatronics
Bioinspiration

Research in Robotics/Vision

Shenlong Wang's Research Group

Indoor Robots, Self-Driving, and Computer Vision.

Robotics
Research
Future-Oriented

Sweet Gestures: Interactive Cupcake Sprinkling Robot

Human-Centered Autonomy Lab

Join us for an interactive adventure with a state-of-the-art robot arm that understands your gestures. Watch in awe as it cleverly detects your favorite cupcake flavor and rewards you with a delicious, free cupcake. Join us for a taste of technology and treat yourself!

Robotics
Research
Programming

DIGITAL COMPUTER LABORATORY (DCL)

Bridges Beyond Imagination: Conceptual Engineering Unleashed

Agricultural and Biological Engineering Department

Embark on a journey with 'Beyond Boundless Bridges': Conceptual Engineering at its pinnacle. We defy limits, crafting bridges that span beyond the physical – addressing social, financial, and cultural challenges. Join us in breaking barriers, reshaping futures across diverse terrains.

Environment
Design Team
Sustainable

CDA Agricultural Robotics

CDA (Center for Digital Agriculture)

The Center for Digital Agriculture, along with the department of Agricultural and Biological Engineering, booth aims to promote the advances in agricultural technology through participants engagement through their demonstrations of the most advanced field robotics in research and the industry today!

Robotics
Agriculture
Electronics

Illinois Urban Farmers

Illinois Urban Farmers

Urban farming proposes an innovative and sustainable solution to food insecurity within a changing climate.

Agriculture
Future-Oriented
Food

LabEscape

Physics

World-renowned quantum physicist Professor Alberta Pauline Schrodemberg is quarantined and desperately needs your help - the fate and security of the entire world hang in the balance. You'll have to search her lab, solve mind-blowing puzzles to reveal clues, and hopefully find a way to complete your mission! MUST REGISTER IN ADVANCE – visit labescape.org/EOH2024.

Art & Design
Good for older
students
Physics

LEGO Watt Balance: Redefining the Kilogram

Department of Agricultural & Biological Engineering

With the Kibble-Watt Balance, redefine the unit Kilogram using just electronics and LEGOs!

Electronics
Physics
Mechanics

Let's Get Electric!

REACT (Reaching and Educating America's Chemists of Tomorrow)

Sparking curiosity about chemistry & electricity! Come by the REACT exhibit to do some hands-on chemistry! Explore the magic of the fourth state of matter, plasma, and even change the color of the quarters in your pocket. Join us at REACT, where science sparks, electrons dance, and curiosity ignites – because chemistry and electricity are a dynamic duo worth discovering!

Chemistry
Electronics
Molecular Scale

Modifiable Areal Unit Problem (MAUP)

CyberGIS Center

Let's win an election! Maps has many problems and MAUP is one of them. the segmentation and stats of the map can be changed with resolution or how the map is drawn. We will explore the problem and find the way to win an election if we have power to draw a map in favor to our party.

Geology
Research
Art & Design

PortaPrinter by BYLD

[BYLD Innovations](#)

Taking DIY to the next level with 3D printing!

The Amazing World of DNA

[American Society of Agricultural and Biological Engineers](#)

Come learn the basics of DNA and discover the wonders it holds!

Robotics
Kid-Friendly
Good for older students
DNA
Biology
Art & Design

ELECTRICAL AND COMPUTER ENGINEERING BUILDING (ECEB)

A Robot That Sees the World

[Individual](#)

See a robot we built from scratch navigate around an obstacle course created by YOU. Learn about all the magic that empowers self-driving vehicles. Get a chance to see the world through the robot's eyes through a cool visualization! No matter what you're interested in: software, electronics, 3D design, math, unsure: we have someone that will be able to explain how every part of the robot works. Whether you're excited about robots, nervous of their implications, or somewhere in the middle, this exhibit is for you!

Robotics
Electronics
Physics

A.O.E. Racers

[Alpha Omega Epsilon Sorority](#)

AOE Racers showcases two small cars that are driven against each other. The differences between the cars demonstrates different engineering principles for kids to learn more about. Come test drive the cars and learn more about how they work!

Electronics
Programming
Mechanics

Building in Minecraft and View Modes of 360-Degree Video

[CS STARS](#)

Build things in Minecraft and Virtual reality 360 View Demo

Electronics
Kid-Friendly
Programming

ClassTranscribe I-Notes

[Universal Design for Learning \(UDL\) and Accessibility Research Group](#)

Come learn how to generate digital textbooks from lecture videos using ClassTranscribe's I-Notes! ClassTranscribe is an experimental, cutting-edge video player with many accessibility features for students. With the click of a button, videos in ClassTranscribe can be converted into digital books known as I-Notes!

Programming
Research
Good for older students

Crackdown

[Crackdown](#)

Crackdown is an app that has a new approach to productivity by sending sarcastic notifications and creating a goal-oriented planner!

Programming
Good for older students
Electronics

Dev Ada Projects

[Women In Computer Science](#)

Come see groundbreaking computer science projects by Dev Ada participants!

Passion Project
Programming
Smart Technology

Fun with Power and Energy!

[ECE Power & Energy Area](#)

Come to the 4th floor of the electrical and computer engineering building and play with assorted interactive demos in the wonderful world of power and electricity! Shoot a ring cannon, see our amazing floating frying pan, learn how solar panels work, and lots more!

Electronics
Kid-Friendly
Sustainable

Gaming Control for Amputees

[Individual](#)

We designed an accessible gaming controller for upper limb amputees to help them with their physical training as well as improve their mental health with recovery. See the device in action and learn about electrical sensors at our exhibit!

Electronics
Health & Medicine
Smart Technology

Illini Solar Car ECEB Booth

[Illini Solar Car](#)
Racing the World's Best Solar Electric Vehicle!

Cars
Sustainable
Electronics

Illini VEX Robotics VEXU

[Illini VEX Robotics](#)
Learn about Robotics and Mechanical Design by playing Robot Soccer!

Robotics
Kid-Friendly
Mechanics

Illini VEX Robotics: Software Development

[Illini VEX Robotics](#)
Flying and mind reading fun with some AI!

Robotics
Programming
Electronics

Immersive Learning Laboratory

[Electrical and Computer Engineering Department](#)
Learn physics in VR!

Physics
Programming
Research

Information Trust Institute

[Grainger College of Engineering](#)
(Cyber)Secure your Future, a Hands-On Perspective

Data Science
Electronics
Smart Technology

LLM Powered Chatbot

[Open Source At Illinois](#)
Discover the Power of AI Chatbots! Large Language Models are transforming communication. Immerse yourself in interactive, AI-powered conversations. Investigate cutting-edge technology in a hands-on setting. Witness the impact of AI on future engineering!

Data Science
Good for older
students
Programming

Motion Mimicry Arm

[Individual](#)
Are you a robotic arm? Because just like in manufacturing, you've got the precision to assemble a perfect connection, the spark to weld our interests, the colors to paint our moments, and the strength to handle whatever comes our way.

Robotics
Electronics
Mechanics

Motion Planning in Automation

[Parasol Lab](#)
Come see how robots sort and deliver treats! Watch as the robot arm organizes candies, and then the mobile robot brings them to you. It's a show of sweets and robots – simple, fun, and totally delicious!

Robotics
Research
Electronics

NeuroTechX@UIUC

[Organization NeuroTech](#)
NeuroTech is dedicated expand the view of neurotechnology, see first hand how EEG systems are used to help make strides in research!

Research
Programming

RadarVision

[CS437](#)
See the Unseen, Steer the Future! RadarVision revolutionizes driving with its cutting-edge radar technology, seamlessly integrated into your car. This innovative project utilizes advanced radar systems to gather intricate point cloud data, providing a real-time analysis of the vehicle's surroundings. It's not just about detecting obstacles; it's about understanding them. With RadarVision, every object on the road becomes a detailed part of a comprehensive 3D radar map, offering unparalleled insight and safety for obstacle avoidance. Navigate the roads with confidence and clarity – welcome to the future of driving with RadarVision.

Programming
Smart Technology
Cars

Red Light Green Light

[Tau Beta Pi - The Engineering Honor Society](#)
"STOP!" what you're doing and "GO!" play Red Light Green Light with Tau Beta Pi! Test your RC-car driving skills in this classic game. Learn about our traffic light coding and construction and leave with a fun souvenir.

Electronics
Cars
Programming

Rhythmic React

[ACM SIGCHI](#)

One of the best ways to get through a tough run is by listening to good music. Music can also motivate and help us keep a consistent pace. With Rhythmic React SIGCHI is aiming to make the process of choosing music during a workout easier by syncing your pace with songs from your chosen playlists. All you need to do is click the start button, choose your favorite playlist and start your workout!

Mobile App
Music
Exercise

RoboMaster

[RoboMaster](#)

The UIUC RoboMaster RSO is a dynamic community of students from diverse majors, united by a passion for robotics and innovation. Based in the ECEB OpenLab, our team specializes in mechanical design, embedded systems, and computer vision. Engaging in the global RoboMaster competition, we offer hands-on experience and a collaborative environment for students to excel in the field of robotics.

Robotics
Mechanics
Electronics

Robot Social Touch

[RoboTouch Lab](#)

We welcome you to come interact with our super friendly robot Reachy!

Robotics
Smart Technology
Electronics

RoboTouch

[RoboTouch Lab](#)

Making Robots Feel Through Touch.

Robotics
Prosthetics
Programming

ScribeAR: Augmented-Reality Captioning

[ScribeAR](#)

Come and try out ScribeAR, a cutting-edge augmented-reality platform for real-time captioning! By combining advanced speech-to-text and sound visualization tools with the latest in augmented-reality headsets, ScribeAR is rethinking what accessible captioning looks like. Learn how ScribeAR is improving communication access, from classrooms to coffee shops.

Programming
Smart Technology
Electronics

SegBin.ai

[TerraVortex](#)

Discover TerraVortex's Waste Revolution: SegBin! A Stylish waste sorting extension on any dustbin. Throw your waste and we sort. Experience the future of sustainability. TerraVortex: Ignite Change #SegBinRevolution #TerraVortexInnovates

Smart Technology
Sustainable
Electronics

SHPE Technical Team

[Society of Hispanic Professional Engineers](#)

Take a peek into the future! Type anything and our hand will replicate it in ASL automatically! Also see our leading image detection that will feature in our AI Lotería game!

Programming
Smart Technology
Electronics

Sigma Phi Delta Engineers: The Electronics Behind Music

[Sigma Phi Delta](#)

Sigma Phi Delta Engineers: Guitar Pedals and The Electronics behind Music

Music
Electronics
Art & Design

Solar Flower Power

[Women in Electrical and Computer Engineering](#)

From Petals to Power, come see the WECE Solar Flower: A solar panel axis that tracks the location of the highest intensity light source and shifts the solar panel to face it for greatest power efficiency.

Solar Power
App Design
Motor Control

Surgical Risk Calculator

Individual

Have you ever wondered how surgeons make decisions that help save lives? Well it certainly is a team effort, with many variables involved. We are presenting the ability to understand all those decisions at the click of a button, using a predictive algorithm to tread the fine line of life and death on the table.

Biology
Health & Medicine
Programming

Table Scout

Individual

Welcome to Table Scout - 'See Your Seat Before You Step a Foot!' Our object detection solution effortlessly spots and locates open seats, transforming your public space experience. Find open tables instantly, saving time and hassle. Say goodbye to uncertainty and hello to convenience.

Data Science
Smart Technology
Programming

UIUC's ECE Department

UIUC Electrical and Computer Engineering (ECE Student Advancement Committee)

Explore the innovative world of Electrical and Computer Engineering at our booth! Discover student projects, including a live demo of AirSticks, an immersive drumming simulation experience, and engage in hands-on learning by making your own paper circuits, while supplies last.

Electronics
Smart Technology
Kid-Friendly

ENGINEERING STUDENTS PROJECTS LABORATORY (ESPL)

Illini Electric Motorsports

Illini Electric Motorsports IEM is the UIUC's Electric Formula SAE team. We design, manufacture, and race electric formula style race cars. Come by and look at our car and our custom components.

Cars
Design Team
Electronics

Illini Pullers

Engineering Students Projects Laboratory (ESPL) Illini Pullers- pulling tractor design team.

Design Team
Agriculture
Mechanics

Illini Solar Car ESPL

Illini Solar Car Racing the World's Best Solar Electric Vehicle!

Cars
Sustainable
Electronics

SAE Baja Off-Road Illini

UIUC SAE Baja Off-Road Illini SAE Baja Off-Road Illini designs and builds an off-road vehicle to compete with other collegiate teams across the country. Come see our vehicle race!

Design Team
Cars
Mechanics

Join us for the 7th Annual

CENTRAL ILLINOIS STEM FAIR

Wednesday, April 10, 2024
6-8 p.m.
Rochester High School Athletic Complex







• ROBOTS • DRONES • ESPORTS • AVIATION • CHEMISTRY •
• METEOROLOGY • PHYSICS • TECHNOLOGY •
• AND MANY HANDS-ON ACTIVITIES! •

Students, families, teachers from all schools in Central Illinois are encouraged to attend!

The event is FREE.

Register at
central-illinois-stem-fair.odoo.com



All about ChemE

American Institute of Chemical Engineers
Come see where Chemical Engineering can take you!

Chemistry
Environment
Food

AlphaFold Demo

BMES
Learn about a machine learning application in biology!

DNA
Programming
Molecular Scale

Astronaut's Toolkit

Illinois Space Society
Craft and design your own space object retrieval tools with Astronaut's Toolkit!
Explore astronaut-tested tools from competitions, then build your own tools for retrieving objects in a sand box environment.

Outer-Space
Future-Oriented
Design Team

Balloon Blast-off

Illinois Space Society
Explore the choices made when creating rockets and propulsion systems!
Learn more by crafting your own design and propelling them with balloons in this hands-on exhibit!

Outer-Space
Physics
Future-Oriented

Bionic Drawing

Department of Bioengineering
Watch a drawing get made...just by flexing muscles!

Health & Medicine
Biology
Electronics

ChBE GSAC: Mass Transport and DNA

Chemical and Biomolecular Engineering Graduate Student Advisory Council
Ever wondered why coffee dries in a ring? Ever thought about what DNA actually looks like? Come stop by and learn about surface tension, the Marangoni effect, and DNA extraction from strawberries!

Chemistry
Biology
DNA

Developing Machine Learning Model for Ocular Disease Diagnosis

Biomedical Engineering Society
Training a Machine Learning Model to Diagnose Ocular Diseases to replace inefficient and expensive modalities.

Health & Medicine
Smart Technology
Programming

ECG Sleep Analysis

Biomedical Engineering Society
Automating sleep since 2023.

Biology
Health & Medicine
Electronics

Footprint of Humanity's Technology

Illinois Space Society
Witness simulated landers navigate challenges on our sandbox moon. Learn about NASA's Human Lander Challenge and discover design innovations to mitigate Plume-Surface Interaction.

Outer-Space
Future-Oriented
Mechanics

Inside the World of Safety

ABE
Our booth will cover various safety topics related to the agricultural industry. These will include grain bin safety and machinery safety practices. EOH attendees will know that entrapment in grain is a serious issue but one that can be avoided if adequate safety measures are in place. We will talk about the force required to rescue someone and then the rescue process. The main takeaway is the dangers of the agricultural industry but more importantly how those dangers can be avoided.

Agriculture
Construction
Smart Technology

Interactive Gaming with Computer Vision

Individual
We created a computer vision system to play video games without a controller. Come choose the game you want to play and control it using only hand gestures. Choose between games like Subway Surfers, Tetris, and more!

Kid-Friendly
Electronics
Programming

Jump Simulation - Urbana

[Carle Illinois College of Medicine](#)

Interactive medical simulation training for future physician innovators

Airways Skills
VR Interactive
Simulation

Mechanical Hand

[BMES](#)

Myoelectric controlled mechanical hand!

Prosthetics
Robotics
Health & Medicine

Murder Mystery Room

[BMES](#)

Explore the choices made when creating rockets and propulsion systems! Learn more by crafting your own design and propelling them with balloons in this hands-on exhibit!

DNA
Chemistry
Health & Medicine

NeuroGame

[BMES](#)

Mind Over Mechanics: Navigate Your Way Through a Game with the Power of Thought!

Biology
Electronics
Programming

Operation Station

[BMES](#)

Come play Operation, but life size! See how a game like Operation can be used and adapted to showcase new surgical planning technology. See if you can assist in a successful operation with your anatomy knowledge!

Health & Medicine
Biology
Programming

Origami DNA

[Biomedical Engineering Society](#)

Interactive exhibit where you can learn about DNA and take part in building the origami DNA structure!

DNA
Biology
Art & Design

PaGeKo Robotics

[PaGeKo Biomimetics Club \(RSO\)](#)

Nature's Innovation Hub: Discover Pakego Biomimetics Club. PaGeKo biomimetics is an RSO that centers around biomimetics, or the fusion of biological mechanisms and robotics. We are currently developing a quadrupedal robot using custom built actuators.

Robotics
Electronics
Programming

POINT VR

[Illinois Center for Advanced Studies of the Universe \(Physics\)](#)

Step into Albert Einstein's shoes and discover general relativity through our immersive virtual reality exhibit, created by UIUC physicists. Explore how gravity shapes space and time in a visually stunning and interactive experience.

Physics
Outer-Space
Good for older
students

Robotics-Controlled Baritone & Saxophone

[BMES](#)

Discover a hands-free way to play musical instruments! Witness computer vision and biosignals change baritone and saxophone notes using only hand signs or the power of your squeeze! Explore the behind-the-scenes process involving Arduinos and Raspberry Pis that makes this possible!

Music
Programming
Electronics

Spinning Separation Sensation: The inside of a centrifuge

[Biomedical Engineering Society](#)

Ever wonder what the similarity between chemistry, biology, biochemistry, and medical labs is? Its the centrifuge! This machine is an integral part of any lab that seeks to separate solutions into different layers, extracting what they are studying from the rest using centrifugal forces. Centrifuges have helped save lives by isolating proteins and pathogens mixed in blood, soil and other sorts of matter. Here, we offer a look inside of the most fundamental tools in science, a close up look into the power of the centrifuge!

Health & Medicine
Biology
Chemistry

Stethopy: Digital Stethoscope and App

I-MADE

Stethopy is a personal digital stethoscope that provides a doctor's office experience from the comfort of your own home. It can connect you with Telehealth professionals and use machine learning to help diagnose your heart condition. Stethopy - Listening for Your Health.

Medical
Technology
Health
Application
Machine
Learning Sound
Dynamics
Biology
DNA
Kid-Friendly

Strawberry DNA Extraction

Biomedical Engineering Society

Learn how to extract DNA from a strawberry and why it's important for engineering!

Traversing the Moon

Illinois Space Society

Experience the transport challenges of Mars and the Moon as exhibitors drive through simulated terrains, explaining current and post-Artemis mission designs. Dive into the complexities of habitat and surface exploration.

Outer-Space
Future-Oriented
Mechanics

TRINA

Intelligent Motion Lab

TeleRobotic Intelligent Nursing Assistant: Remotely operate a real robot through virtual reality.

Robotics
Programming
Research

VRClub's Virtual Deep Dive

Virtual Reality Club at UIUC

Step Into New Realities: Play, Learn, and Explore VR Like Never Before!

Electronics
Smart Technology
Good for older
students

HOLONYAK MICRO & NANOTECHNOLOGY LABORATORY (HMNTL)

Bionanotechnology Lab

HMNTL

Cutting-edge technologies for the detection of pathogenic bacteria and viruses, including SARS-CoV-2 and cancer, are in place. These technologies boast high sensitivity, rapid detection capabilities, and the convenience of being viewable through a cellphone camera. The foundation of these advancements lies in the integration of microfabrication, nanotechnology, and photonic crystal concepts.

Smart Technology
DNA
Biology

Everyday MEMS

Illinois MicroTech

We've all heard of memes, but what about MEMS? Micro-Electromechanical Systems (MEMS) are abundant in everyday life so come by to learn how they work and where they're found!

Mechanics
Electronics
Research

Holonyak Micro Nano Technology Lab

HMNTL

The Holonyak Micro and Nano technology Laboratory exhibit demonstrates how the power of the sun can be used to make patterns on special paper. Similar techniques are used to make patterns on harder materials using UV light and photosensitive chemicals called photoresist. These patterned materials form the building blocks of everyday electronics including LEDs, solar cells, computers, and cell phones. Because these devices are at the micro or even the nanometer scale, they must be made in special environments called cleanrooms that control temperature, humidity, light, room pressure, and particles. Special clothing is also required to work in cleanrooms including hoods, suits, boots, and gloves that protect these delicate structures from the particles we generate just by moving. We will have demonstrations of sun/UV light patterning on paper, posters showing microfabrication processing, and students working in the ECE 444 cleanroom laboratory located on the second floor of HMNTL.

Electronics
Smart Technology
Kid-Friendly

Learn about light with iOptics

[iOptics](#)

Explore the nature of light with demonstrations you can replicate at home!

Physics
Research
Good for older
students

HYDROSYSTEMS LABORATORY

Fluid Mechanics 101

[International Water Resources Association](#)

Here, at the Hydrosystems lab, water is what we are all about. But sometimes, we have to go back to the basics. Come to this exhibit to explore the fundamental properties of fluids and how they flow through simple experiments.

Mechanics
Water
Kid-Friendly

Fluidized Sand

[Civil Engineering](#)

We can walk on sand, but we can't walk on water. Sand is a solid then, right? Engineers think that way, since they put our buildings on top of it. However, in some weird cases, sand can behave like a fluid, bringing destruction to all kinds of things engineers build.

Water
Construction
Weather

Groundwater Flow Model

[Water Resources Engineering and Sciences Department](#)

You can see how water flows underneath the Earth's surface. Just as water moves on the surface through rivers, lakes, and oceans, it is also constantly moving below the surface. We explore flow patterns, the travel of pollutants, and how human interaction affects all of it.

Water
Environment
Kid-Friendly

Hazards of Modern Spillways

[Civil and Environmental Engineering Department](#) [Water Resources Engineering and Science](#)

Spillways are an essential part of dams. During big storm events, they move enormous amounts of water over dams in a controlled way. But these structures, created to keep us safe, can sometimes become dangerous. Do you know why?

Water
Mechanics
Contruction

Hydrology Sandbox

[IRWA/IAHR](#)

Learn how the river basin evolves with natural and anthropogenic events.

Water
Research
Geology

Interactive Water Table

[IWRA/IAHR](#)

This exhibit simulates the flow of a river. From headwaters to tributaries and deltas, participants will have the opportunity to interact with and manipulate channels through plastic gates to guide the river to flow in a desired direction. Flow will eventually power a small plastic water-wheel, representing a turbine, at the river's outlet. This exhibit represents the profound impact that humans can make to our hydrologic cycle as well as concepts of hydropower.

Water
Environment
Kid-Friendly

Little Big River

[IWRA](#)

A 100-ft-long 2-ft-wide "miniature" water flume that simulates natural meandering rivers!

Water
Environment
Mechanics

Protecting Our Coasts from Waves

[Civil Engineering](#), [Water Resources](#)

At beaches around the world, waves and sand are at constant battle. Sand stops the advance of waves, but waves take grains of sand back from the beach. In this exhibit, we see how eco-engineering can help us solve problems that come when we get ourselves mixed in this war.

Water
Environment
Research

HYDROSYSTEMS LABORATORY CONT

EXHIBITS

Sediment Flume

[Water resources Engineering and Science department](#)

The bed and banks of rivers are not fixed. Erosion and sedimentation processes are constantly changing their shape. They have impacts on natural processes and manmade structures. This small-scale model shows how these processes happen and allows us to see how structures interact with them.

Water
Environment
Kid-Friendly

The Shape of our Rivers and Coasts

[IWRA](#)

We know the shape of the land tells water where it should go. But water also moves land around. This interaction forms the Earth's everchanging landscape. Our stream table shows how waves and rivers move through land and how they also can change the land.

Water
Environment
Mechanics

LOOMIS LABORATORY OF PHYSICS

Phononic Sonic Crystal - Frequency Band gap Experience

[Wave Propagation and Metamaterials Lab](#)

Can an array of wooden rods prevent certain musical tones from passing through it? Come listen for the band gap in a "Phononic Sonic Crystal" and decide for yourself.

Music
Physics
Mechanics

Physics Playground

[Society of Women in Physics](#)

Come play at the Physics Playground - explore physics using household objects and enjoy messing with light, air pressure, density, energy, and more!

Physics

Physics Van

[Physics Department](#)

A live show for all ages, turning bananas into hammers, creating explosions, and more!

Physics
Explosions
Live Show

The Physics Alcove

[Society of Physics Students](#)

Beyond the Textbook: Physics in Action

Physics
Mechanics
Good for older
students

MATHEWS AVENUE

CACMS/AUVSL - Autonomous Robotics Showcase

[CACMS \(Center for Autonomous Construction And Manufacturing at Scale\)](#)

Autonomous Systems Engineering -- No Strings Attached. See applications of autonomous robotics both big and small at the booth for the AUVSL research group! AUVSL develops solutions for real world government and industry problems, with a goal of building a technology pipeline from research to commercialization. We use multi-disciplinary approaches and state of the art technologies in systems engineering, machine learning, vision systems, mechatronics, controls, expert systems, dynamic modeling, industrial engineering, and sensor fusion. Our goal is to create a modular, systems-based approach to developing complete offroad autonomous navigation and task completion package. Come see (and maybe operate) some large-scale vehicles and see the future of autonomous construction and agriculture in action! We are looking to recruit more US-national Graduate and Undergraduate students to work on our exciting projects.

Robotics
Research
Programming

Demo of IRIS-made Lunar Rover

[Illinois Robotics in Space](#)

"Illinois Robotics in Space is an organization at UIUC that participates in NASA's annual Robotic Mining Competition. Our IRIS XIV fully autonomous robot we built this year will demonstrate the functionality of the robot. Our robot will demo how it can pick up sand, simulating space environment."

Robotics
Outer-Space
Design Teams

Department of Climate, Meteorology, and Atmospheric Sciences

[Illinois Student Organization of Meteorology \(ISTORM\)](#)

Do you want to understand the power of mother nature? If so, come visit our exhibit to get experience with making tiny tornadoes, cloud identification, how atmospheric measurements are taken, hands-on time with atmospheric instruments, and more!

Weather
Exciting
Great For All Ages

MECHANICAL ENGINEERING LABORATORY

RoboDesign Lab: Dynamic Robotics Showcase

[RoboDesign Lab](#)

Come visit the RoboDesign Lab to see demonstrations of our dynamic legged robots! We develop robots that are dynamically tele-operated, meaning a human pilot moves their own body and the robots copy their motions! Our robot Tello has two legs and can balance and walk! Our robot SATYRR is a full humanoid with wheels on it's feet that can roll around, balance, carry objects, and push obstacles out of it's way!

Robotics
Research
Mechanics

MATERIALS RESEARCH LABORATORY (MRL)

Airing It Out!

[MRL Central Research Facilities](#)

Examples on the effects of vacuum on everyday life.

Kid-Friendly
Outer-Space
Physics

Exploring Vacuum Science, atoms, and molecules with X-ray Photoelectron Spectroscopy

[Materials Research Laboratory Central Research Facilities](#)

Discover how vacuum science can help us understand the properties of materials.

Good for older students
Chemistry
Physics

Illinois MRSEC - That's a Moire!

[Illinois Materials Research Science and Engineering Center](#)

How layering materials can make beautiful pictures - and also important science.

Physics
Research
Art & Design

Illinois MRSEC: Waves are music to your ears!

[Illinois Materials Research Science and Engineering Center](#)

Learn about how waves make the sounds we love to hear.

Electronics
Physics
Music

Micro Wonders: Nanoscribe 3D Printing and Focused Ion Beam Etching

[MRL Central Research Facilities](#)

Embark on a journey where imagination meets innovations: explore Nanoscribe 3D printer and Focused ion beam technology at MRL. Unleash your creativity, choose a picture or word and watch it magically come to life as we etch it onto a human hair or a silicon wafer. Take home a stunning scanning electron microscope image of your microscopic masterpiece (optional) as a souvenir of this unforgettable experience.

Kid-Friendly
Physics
Smart Technology

Optical Properties of Matter

[MRL Central Research Facilities](#)

Discover the intriguing ways that light interacts with objects and how it can be used to look into the internal structure of nature

Kid-Friendly
Physics
Research

Public Quantum Network Demo

[Illinois Quantum Information Science and Technology Center \(IQUIST\)](#)

Interact with an on-campus node of the Public Quantum Network, where you can make measurements on quantum particles. See for yourself how quantum particles can "affect" each other no matter the distance between them, by doing the experiment for which the Nobel Prize in physics was awarded in 2022!

Physics
Kid-Friendly
Future-Oriented

Quantum Information Science Games

Illinois Quantum Information Science and Technology Center

Quantum physics is all around us- you just have to know where to look! Experience the Wonders of Quantum Physics with fascinating demonstrations and hands-on activities, brought to you by the NSF Quantum Leap Challenge Institute HQAN and the Illinois Quantum Information Science and Technology Center.

Kid-Friendly
Physics
Electronics

Quantum Levitation and Wave Lab

Illinois Quantum Information Science and Technology Center (IQUIST)

Quantum physics is all around us-you just have to know where to look! Come explore hands-on activities on quantum levitation, superconductivity, and waves, brought to you by the Illinois Quantum Information Science and Technology Center.

Physics
Chemistry
Future-Oriented

Revealing Water Loving Surfaces

MRL Central Research Facilities

Discover the surface properties of the object.

Physics
Research
Chemistry

The Secret Society on your Cellphone

MRL Central Research Facilities

Take a look (inside and out) at the microscopic life that lives on your cellphone.

Biology
Health & Medicine
Research

The Texture of Everyday Life

Materials Research Lab

We can feel that some surfaces are rougher than others. How do we measure that? This exhibit uses a laser scanning microscope in real time to create zoomed-in 3D images of the surfaces of everyday objects.

Research
Art & Design
Good for older students

Thin Film Revolution: Smart On-Chip Electronics

MRL Central Research Facilities

Empowering Tomorrow: Navigating the Evolution of Smart On-Chip Electronics with Thin Film Technology.

Smart Technology
Electronics

Towards Quantum Technology: "A Review of Communication and Information Storage"

Illinois Quantum Information and Science Technology

Towards a quantum network connecting memories.

Future-Oriented
Physics
Electronics

Unlocking the Mysteries of Insects and Spiders with the Scanning Electron Microscope

Materials Research Laboratory

Discover the special structural colors and functions to observe the detailed features of insects, spiders and bacteria by using SEM.

Kid-Friendly
Biology
Research

Unveiling the Quantum Frontier: Josephson Junctions and Superconducting Qubits

Illinois Quantum Information Science and Technology Center (IQUIST)

Fundamentals of Quantum Computing.

Physics
Smart Technology
Electronics

Wonder of Rechargeable Lithium-Ion Batteries

MRL Central Research Facilities

Explore the fascinating world of rechargeable Lithium-ion batteries and experience how to make such batteries in the laboratory.

Environment
Chemistry
Sustainable

INTERACTIVE, INTERDISCIPLINARY SCIENCE



BECKMAN INSTITUTE OPEN HOUSE

April 5, 9 a.m. to 4 p.m.
&
April 6, 9 a.m. to 3 p.m.



Meet KEMAR the listening robot.

Levitate objects with
your brain.



Zoom in on cicadas, beetles,
and bees with a microscope.

Cheer on the cyber-octopus
as it tackles an obstacle course.



Use medical imaging to find a
hidden prize.

Practice 3D-printing with
chocolate ink.



Go on a virtual reality adventure.

Learn about your brain
(from a slug).



Ceramics Science

[Material Advantage](#)

Why do ceramics shrink after being fired? How can we reuse dried ceramics that have not been fired, but not fired ceramics? What makes ceramic glaze change color after firing? Come discover how the properties of ceramic materials can change here!

Chemistry
Art & Design
Kid-Friendly

Edible Hydration “Blob”

[MSE183](#)

Discover how the world could change if plastic water and other drink bottles could become edible. Imagine if landfills could stop building and oceans could become unpolluted thanks to one little bubble holding all of the drink that you could want. With the hydration blob the world can say goodbye to plastic water waste and litter and instead say hello to cost friendly, fully edible, and environmentally efficient hydration systems of the future.

Sustainable
Food
Chemistry

Electrochromic Window

[Qing Cao Research Group](#)

Smart glass that changes transparency with a touch of the switch! Our exhibit offers an interactive demonstration of how electrochromic glass works. With just the press of a button, you can watch the glass transitions back-and-forth between transparent and opaque. Learn about the science behind this remarkable phenomenon, and understand how it can control light and heat, contributing to personal experience and energy efficiency. Commercial devices have already been implemented in various fields, such as the smart windows on Boeing 787!

Smart Technology
Electronics
Sustainable

Ferrofluids

[MSE 183](#)

Want to have a “Venom”ic feel?

Molecular Scale
Future-Oriented
Robotics

Ferrofluids: Exploring Magnetic Marvels

[Material Advantage](#)

Come witness the alien-like material that combines science with artistry! Interactive demos will explain the properties behind ferrofluids and how they are used in technology today.

Physics
Chemistry
Smart Technology

From Farm to Formulation: Creating Plastics from Milk and Potatoes

[MSE 183](#)

Enter a world where dairy and farm staples become the building blocks of tomorrow! Explore our exhibit to witness the fascinating alchemy as milk and potatoes magically transform into eco-friendly plastic wonders.

Sustainable
Chemistry
Agriculture

Fundamentals of MatSE

[MSE 183](#)

Vanishing beaker, Metamaterials exhibit, rod frequency and other MatSE fundamental topics.

Molecular Scale
Physics
Kid-Friendly

Gel-ightful Innovations: Unraveling the Secrets of Hydrogel Wonders

[Material Advantage](#)

Unleashing the Power of Alginate Hydrogels: Crafting Tomorrow’s Tissues, Today!

Biology
Kid-Friendly
Research

Healing wounds with Gelatin Hydrogels

[Wang Lab](#)

Common ingredients like gelatin which can be used to make jello can also be used in the treatment of deadly diseases. In our exhibit we will show you how gelatin can be incorporated into skin patches to help people heal from injuries.

Biology
Health & Medicine
Kid-Friendly

Oobleck

[Keramos](#)

Come explore the strange and mysterious behavior of non-Newtonian fluid.

Material Science
Physics
Hands on

Piezo-Pavement: Harvesting Energy from Traffic[MSE 182/183](#)

Quartz, DNA, bone, silk, and even wood... What do these things have in common? They all exhibit the piezoelectric effect where materials can convert mechanical energy into electric energy and vice versa. We have 3 culminating displays that follow the most primitive demonstration of how piezoelectric materials are used to how it can be applied to mass scale and ultimately decrease fossil fuel usage.

Molecular Scale
Electronics
Cars

Tantalizing Thermochromics[Material Advantage](#)

Tantalizing Thermochromics is all about materials which change colour with regards to temperature! Come by and see colour appear and disappear out of materials as they are heated or cooled, including with your own body heat!

Chemistry
Art & Design
Mechanics

NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS (NCSA)**“Atlas of a Changing Earth” Documentary Screening**[Advance Visualisation Laboratory](#)

“Atlas of a Changing Earth” is a documentary co-produced by NCSA about the dynamic processes causing coastal glaciers to melt. It’s the story of how a revolution in the making of maps is shedding new light on our planet’s evolution in the wake of rising global temperatures.

Environment
Weather
Water

AI, Extreme Scale Computing and Scientific Visualization for Gravitational Wave Astrophysics[NCSA Gravity Group](#)

Visit our exhibit and learn how students are developing world class artificial intelligence solutions to study the universe through the observation of gravitational waves produced by the collision of black holes. Play black hole ping pong and take a selfie where you see yourself embedded in a black hole. It will be an out of the world experience!!

Physics
Data Science
Kid-Friendly

Design For America[Design for America](#)

Learn about Human-Centered Design by building a user-centered house!

Kid-Friendly
Design Team
Good for older
students
Research
Programming
Kid-Friendly

National Center for Supercomputing Applications (NCSA)[OVCR](#)

At NCSA, our advanced cyberinfrastructure and expertise provide a hub for transdisciplinary research that unites academic institutions and global companies in search of the answers to the world’s most challenging problems and help us meet the needs of future generations.

Students Pushing Innovation Internship Program[NCSA Research & Education](#)

The National Center for Supercomputing Applications (NCSA) has a rich history of nurturing innovative concepts, and some of the best ideas have come from highly motivated, creative undergraduates. NCSA launched the Students Pushing INnovation (SPIN) internship program in 2012. Our program’s mission is to provide University of Illinois undergraduates the opportunity to apply and develop skills that address real challenges aligned with their interests. SPIN interns work on research projects involving high-performance computing, data analysis and visualization, cybersecurity, and other areas of interest to NCSA. Want to know more about SPIN projects? Join us for in-person demos and meet outstanding SPIN interns who make this program a success!

Research
Programming
Kid-Friendly

UIUC.chat platform for rapid deployment of knowledge-based chatbots

[Center for AI Innovation](#)

Need an expert advice on a complex topic? AI can help with that! Our multi-modal AI chatbot can “learn” about any topic and then generate highly detailed responses to any question you ask. From serving as a course teaching assistant to helping farmers identify crop diseases, our generative AI platform is ready to serve.

Future-Oriented
Smart Technology
Programming

Visualization Demonstrations

[NCSA Advanced Visualization Lab](#)

Award-winning, cinematic-style visualizations of science data in our stereo theater.

Outer-Space
Molecular Scale
Weather

NEWMARK CIVIL ENGINEERING LABORATORY

American Society of Civil Engineers

[American Society of Civil Engineers](#)

Learn what civil and environmental engineering is all about!

Construction
Environment
Water

American Society of Civil Engineers

[American Society of Civil Engineers](#)

Learn about the engineering behind construction! Visit our booth to see load testing on wooden bridges designed by students and other demonstrations and activities in the exciting world of civil and environmental engineering!

Construction
Environment
Water

Contextual Engineering in Practive: Engineers without Borders UIUC

[Engineers without Borders UIUC](#)

Challenge your friends and family to a test of communication, an overlooked, but notoriously tricky and important part of engineering everywhere! See if your group, of any ages, can beat our design challenge, without speaking! Learn about how Engineers without Borders uses these skills in contextual engineering to complete awesome engineering projects around the world!

Competition
Design Team
Kid-Friendly

Intermodal Game

[American Railway Engineering and Maintenance-of-Way Association Student Chapter at UIUC](#)

Come learn about how containers move across the country!

Railroad
Transportation
Competition

Railway Train Control and Signaling

[American Railway Engineering and Maintenance-of-Way Association Student Chapter at UIUC](#)

Come learn about railway signaling! Learn about the technologies that keep trains from colliding!

Railroad
Signaling
Transportation

Safe Light

[KESS \(Korean Engineering and Science Society\)](#)

Experience the safer town vision with “Safe Light”! Discover our streetlight alert system designed to warn pedestrians, cyclists, and drivers of potential dangers. The city now introduces color-changing streetlights in vulnerable areas, in collaboration with “Illini Alert.” Visit our project to envision the impact of “Safe Light” implementation on our town!

Electronics
Programming
Smart Technology

Train Puzzle

[American Railway Engineering and Maintenance-of-Way Association Student Chapter at UIUC](#)

Come learn what each type of railcar carries!

Railway
Transportation
Puzzle

Train Simulator

[American Railway Engineering and Maintenance-of-Way Association Student Chapter at UIUC](#)

Come learn how to operate a train!

Train
Game
Interactable



making progress means harnessing potential

The young minds of today are the ones that step forward to shape the future. At Chevron, we champion science, technology, engineering, and math education to help the next generation develop real-world, problem-solving and critical-thinking skills. Guiding students toward tomorrow's opportunities is how we help make progress happen.

Learn more at [Chevron.com](https://www.chevron.com)

Chevron is proud to sponsor the University of Illinois Engineering Open House

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A Journey to the Dynamic Earth's interior

[Geodynamics Lab](#)

Ever wondered how the deep part of the Earth works? Does it look the same millions of years ago? Let us bring you to the deep time and deep depth of Earth through a virtual tour! Have a sip of how the "deep" Earth shape our home today.

Geology
Physics
Data Science

An Insight into Remote Sensing Research: PhD Students' Perspectives

[Department of Geography and GIScience](#)

Join us for a fascinating glimpse into the daily life of remote sensing PhD students. Our exhibit showcases the innovative tools and techniques used by these scholars as they navigate the world of data collection and analysis. Learn how they transform raw data into meaningful insights, contributing to advancements in various fields. Whether you're curious about the technologies used in remote sensing or interested in the practical applications of this research, our exhibit offers a unique opportunity to explore the cutting-edge of scientific inquiry. Don't miss the chance to delve into the unseen yet impactful world of remote sensing!

Agriculture
Environment
Data Science

Care for the Air

[AAAR@UIUC](#)

We will show air pollution research in an accessible way. Visitors could see the mini smog in a jar, air quality sensor, an air filter in action and make their own way to "catch" air pollutants.

Environment
Research
Kid-Friendly

Frontiers of Geospatial Data Science

[Dept of Geography and GIScience, Healthy Regions & Policies Lab](#)

Let's explore the fusion of computer science and geography! Play Geoguesser and VR games to get spatial thinking skills. Contribute your pandemic story to a dynamic living Atlas. Make your paper globe for a keepsake and so forth!

Environment
Research
Data Science

Power of Clean Water

[Tom Johnson Research Group](#)

See how water, the most important resource for life, goes from dirty to clean and build a molecular model of water contaminants.

Environment
Water
Chemistry

Radioactive Decay In Real Time

[Helium Analysis Laboratory](#)

See radioactive decay happen in real time, in ways you couldn't imagine before! Learn how we apply radioactive decay to minerals and how that allows us to date rocks.

Geology
Chemistry
Research

Rocks and Minerals Show

[Geology Department](#)

Cool Rocks Here! Come look at, touch, and learn about cool rocks.

Geology
Environment

NORTH QUAD

Baking Soda and Vinegar Rockets

[THRUST High Powered Rocketry](#)

Simple science, remarkable rockets!

Outer-Space
Kid-Friendly
Good for older
students
Combustable
Outer-Space
Physics

SWIFT - Acrylic Engine

[THRUST@UIUC](#)

Come see the university's first clear combustion rocket engine hot-fire live! With a fuel grain made out of clear cast acrylic and pure oxygen as oxidizer, it's sure to excite viewers of all ages!

Spectacular Solar Observing

[University of Illinois Astronomical Society](#)

Get a chance to look at our blazing Sun through U of I's 125-year-old Dome Telescope! Along with solar observing, learn more about how our Sun provides the energy for all life on Earth! Learn how craters impact the Moon by throwing your own! Explore the chemical composition of different materials using a spectroscope! All right here at the Observatory!

Outer-Space
Physics
Kid-Friendly

SIDNEY LU MECHANICAL ENGINEERING BUILDING (LUMB)

AIAA Drone Face-Tracking Demonstration

[American Institute of Aeronautics and Astronautics](#)

Are you interested in drones, jet engines, or futuristic aircraft? Come by the AIAA exhibit to interact with one of our drones and learn about cool aerospace engineering projects!

Programming
Robotics
Planes

Au-Tau-matic Chess Board

[Kappa Theta Tau](#)

See through the mystery of a magic chess set with the transparent "Au-Tau-matic Chess Board", and test your skills against it's custom chess program!

Mechanics
Electronics
Good for older students

EITC Rube Goldberg Machine

[Engineering in the Classroom](#)

Engineering in the Classroom (EITC) is an organization that provides education outreach to grade school students in order to promote engineering as a career. EITC hosts an event during EOH. The participants in this event create a Rube Goldberg machine. These machines have several moving parts that trigger one another to complete a simple task. The participants are judged based on their creativity and execution of their designs. More information on their website: engineerintheclassroom.us

Design Team
Physics
Mechanics

Engineering Outreach Society: Float a Boat

[Engineering Outreach Society](#)

Float your boat and make a splash with your project. We test which boat floats the best when we add marble weights to them. Come build your own design with the items given and see if your boat will float or sink!

Kid-Friendly
Physics
Design Team

Food 3D Printer

[American Society of Mechanical Engineers - Special Projects Committee](#)

Imagine being able to customize the food on your plate with 3D printing. Come see the future of food and learn more about the applications of 3D printing at the Food 3D Printer!

Food
Programming
Robotics

From Blueprint to Blastoff: DIY Rocket Science

[Individual](#)

What would happen if someone with an engineering degree got a chance to re-do their rocketry competition from high school? Come by to see how this rocket went from blueprint to blastoff in 3 months.

Good for older students
Physics
Electronics

Gear Train

[American Society of Mechanical Engineers Special Projects](#)

Gear up to join our journey into the world of mechanical engineering! Manually shift gears through our custom-designed gearbox to observe the intricate relationship between gear ratios and rotational speeds(RPMs). More LEDs on our board will light up as the RPM increases. Challenge yourself: can you strategize and select the right gear to light up the entire LED board, especially those elusive top red lights?

Mechanics
Cars
Electronics

Hand-Gesture Controlled Drone

[American Society of Mechanical Engineers Special Projects](#)
A Robo-tronic Spectacle that Translates Fun into the Future!

Robotics
Electronics
Future-Oriented

Home Assistance Railbot

[American Society of Mechanical Engineers](#)

The Home Assistance Railbot is a device capable of carrying everyday items up/down the stairs as an aid to those who may need the assistance. This enables the user to focus on getting up/down the stairs without the burden of simultaneously carrying items.

Design Team
Mechanics
Health & Medicine

Illini VEX Robotics R&D

[Illini VEX Robotics](#)

Reinventing the Wheel(chair).

Research
Robotics
Health & Medicine

Illinois Space Grant Consortium

[NASA](#)

Are you ready for the Solar Eclipse on April 8, 2024? Come by and learn about the upcoming eclipse and how you can experience this exciting event. The next solar eclipse for the continental US will be in 2045.

Kid-Friendly
Outer-space
Good for older
kids

NSBE Drones

[National Society of Black Engineers](#)

Get ready to be wowed! Come see the National Society of Black Engineers' drone project. Crafted from 3D-printed parts, this drone is more than just a cool gadget – it's a glimpse into the incredible possibilities of engineering. Swing by and join the fun as we take you on a journey through innovation and technology.

Planes
Design Team
Robotics

Poles and Pulls: Magnetic Fishing

[Individual](#)

Reel in the Thrill: Magnetic Fishing - Unleashing Fun and Unraveling the Mysteries of Magnetism!

Physics
Kid-Friendly
Water

Pop-a-Shot EOH24

[American Society of Mechanical Engineers Special Projects](#)

Pop-a-Shot. Robot vs. Human. Shoot Your Shot!

Robotics
Mechanics
Kid-Friendly

R2D2 x Computer Vision

[Society for Engineering Mechanics \(SEM\)](#)

Control R2D2 with the Force (of 21st century's Computer Vision technology), and (if it isn't the droid you're looking for) come talk to our team about learning programming as a Mech Engineer, OpenCV, mechatronics, and rebelling against your chosen major with multidisciplinary projects.

Robotics
Mechanics
Smart Technology

Reaching for Greatness: WiM Claw Machine

[Women in Mechanical Science and Engineering](#)

Try out our hydraulic claw machine and test your knowledge about women in engineering! Come see hydraulics, woodworking, and 3D printed components in action.

Robotics
Mechanics
Smart Technology

Real Life Angry Birds

[American Society of Mechanical Engineers](#)

Come join us for a real life Angry Birds game! Launch angry birds at pig targets using a trebuchet.

Mechanics
Physics
Kid-Friendly

Rube Goldberg Machine

[Rube Goldberg Society](#)

This chain reaction machine uses household items to complete a simple task in a complicated way. This year, our machine will complete the task: "put toothpaste on a toothbrush!"

Design Team
Kid-Friendly
Art & Design

SEM da Vinci Drawing Machine

[Society of Engineering Mechanics SEM](#)

The SEM da Vinci Drawing Machine is a completely mechanical device capable of drawing any line drawing. The drawing machine is essentially a mechanical computer, as it stores the data of the line-drawing in two physical rotors.

Mechanics
Art & Design
Good for older students

SEM Mini Ocean Cleanup Machine

[Society of Engineering Mechanics](#)

The SEM Mini Ocean Cleanup Machine tries to tackle the issue of garbage and plastics floating on the surface of the ocean. The machine is a remote-controlled boat capable.

Boats
Mechanics
Environment

Spinlaunch

[Individual](#)

Would you like to be involved in space exploration? Join us in launching satellites together! Visit our booth to experience one of the most cutting-edge technologies and see how this device assists in launching multiple satellites for space exploration.

Mechanics
Outer-Space
Sustainable

Student Aircraft Builders

[Student Aircraft Builders](#)

Get ready to rivet and roll! Join the Student Aircraft Builders Club at the Engineering Open House for an epic Dog Tag Riveting Exhibit. Let's soar into the world of hands-on aircraft construction and engineering coolness. Don't miss the flight – see you there!

Planes
Kid-Friendly
Good for older students

SWE Carnival Fun House

[SWE Illinois](#)

Explore a world of magical engineering wonders!

Kid-Friendly
Physics
Design Team

The Rheology Zoo

[Ewoldt Research Group](#)

We demonstrate simple and complex materials (water, sand, therapy putty, polyethylene oxide solution) to show different rheological phenomena like how these materials under different conditions can behave like a solid or a liquid, and see these phenomena in daily life products such as toothpaste, hand sanitizer, chocolate, ketchup, etc.

Research
Mechanics
Chemistry

SOUTH QUAD

Stellar Launch

[Illinois Space Society](#)

Join the Illinois Space Society in launching a model rocket to roughly 200 feet on the South Quad! Follow as it goes through the stages of high power rocketry of ignition, flight, and landing under a parachute!

Outer-Space
Future-Oriented
Design Team

STOCK PAVILION

iRobotics

[iRobotics](#)

Come visit us for an interactive robotics booth! With sumo-bots, FPV maze, and a showcase of our project and competitive teams robots!

Robotics
Design Team
Electronics

Robobrawl

[Robobrawl](#)

The Robobrawl competition consists of 30-pound and 3D printed 1-lb combat robots from different universities and private teams fighting one-on-one matches in a double elimination bracket with the goal of destroying the opponent bot. It's open to all who wish to view.

Robotics
Competition
Exciting

Cloud Chamber

[American Nuclear Society](#)

See the path of radiation through air with your own eyes as vapor trails form in a cloud chamber.

Molecular Scale
Physics
Health & Medicine

DC Glow

[American Nuclear Society](#)

An up-close demonstration of a plasma, the fourth state of matter, being created and manipulated using electric fields and permanent magnets.

Physics
Good for older students
Future-Oriented

Fusor

[American Nuclear Society](#)

Witness the creation of a high-energy plasma inside of a miniature fusion reactor and learn about fusion energy.

Physics
Good for older students
Research

Model Reactor

[Women In Nuclear](#)

Demonstration of how nuclear chain reactions work in a reactor using mouse traps and ping-pong balls.

Environment
Physics
Sustainable

Model Reactor

[Women In Nuclear](#)

A model nuclear reactor that shows how power is controlled in the reactor and produced for use.

Environment
Physics
Sustainable

Radiation Science Table

[Women In Nuclear](#)

The Radiation Science Table demonstrates how radiation is used to detect tumors, how Geiger counters detect radiation, and how X-rays work.

Physics
Kid-Friendly
Health & Medicine

Z Type Schlieren Flow Visualization

[Society for Engineering Mechanics](#)

Want to see the invisible? The Z-Type Schlieren will let you see what your eyes can't! From liquids becoming gases, to a sea of air movement from a hair dryer.

Mechanics
Physics
Research

TRANSPORTATION BUILDING

Egg Drop Challenge

[Institute of Industrial and Systems Engineers](#)

Welcome to IISE's EOH for this year. This year, we'll learn all about industrial and Systems Engineering, through fun, interactive games, and workshops where you all can learn about the interesting, technical work we have, while enjoying the fun, optimizing work as well. Come through to our EOH exhibits, showcasing egg drop challenges, learning about the amazing projects that seniors have made, mazes, 3d software learning workshops, and more!!! We hope to see you all there!

Design Team
Smart Technology
Kid-Friendly

Mobility for Our Future

[Institute of Transportation Engineers UIUC Chapter \(ITE@UIUC\)](#)

Transportation is one of the key building blocks of modern society and impacts every aspect of our everyday lives. However, there are two major crises that transportation is facing: climate change and safety. Transportation accounts for one-third of America's carbon dioxide emissions and, and tens of thousands of users die on our roads every year. ITE is dedicated to creating a safer, more sustainable, and more equitable transportation system for all. We believe that the future of transportation is bright. From autonomous vehicles, electric vehicles and Intelligent Transportation Systems (ITS) to multimodal urban planning, high-speed rail and transit-oriented developments, the transportation industry is ripe with innovation. Transportation is a highly diverse field that overlaps with environmental engineering, construction engineering, computer science, geography, politics, and more. We all rely on transportation to sustain our lifestyles, and we must all work together to build a transportation system for the future.

Data Science
Smart Technology
Future-Oriented

Product Design Lab

SE101/ISE/IISE

Explore the world of 3D prototyping through our 3D scanning selfie station, 3D printing, and design project displays!

Art & Design
Kid-Friendly
Design Team

Senior Design Exhibition

Institute of Industrial and Systems Engineers

Welcome to IISE's EOH for this year. This year, we'll learn all about industrial and Systems Engineering, through fun, interactive games, and workshops where you all can learn about the interesting, technical work we have, while enjoying the fun, optimizing work as well. Come through to our EOH exhibits, showcasing egg drop challenges, learning about the amazing projects that seniors have made, mazes, 3d software learning workshops, and more!!! We hope to see you all there!

Research
Future-Oriented
Good for older
students

Supply Chain Maze

Institute of Industrial and Systems Engineers

Welcome to IISE's EOH for this year. This year, we'll learn all about industrial and Systems Engineering, through fun, interactive games, and workshops where you all can learn about the interesting, technical work we have, while enjoying the fun, optimizing work as well. Come through to our EOH exhibits, showcasing egg drop challenges, learning about the amazing projects that seniors have made, mazes, 3d software learning workshops, and more!!! We hope to see you all there!

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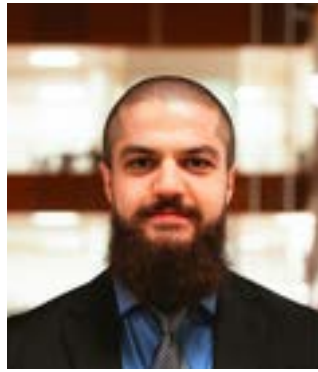
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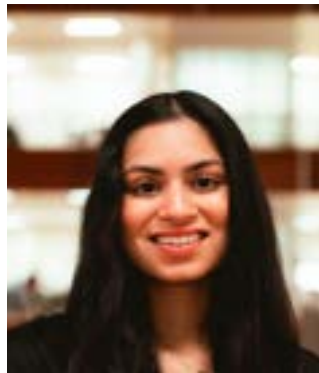
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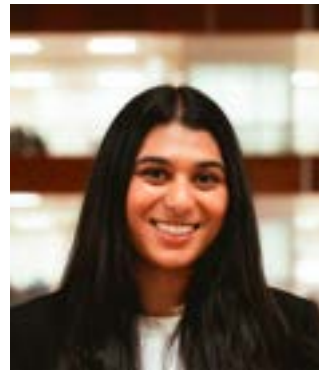
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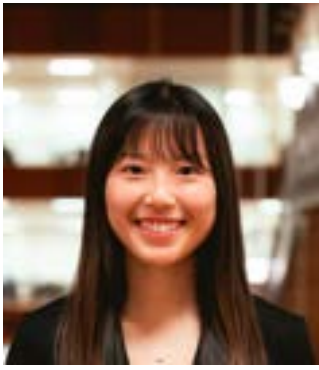


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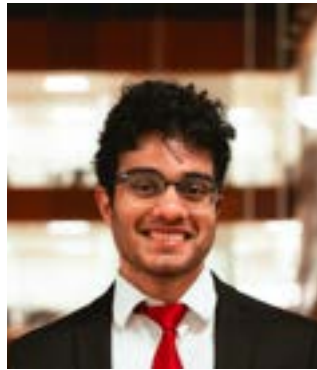


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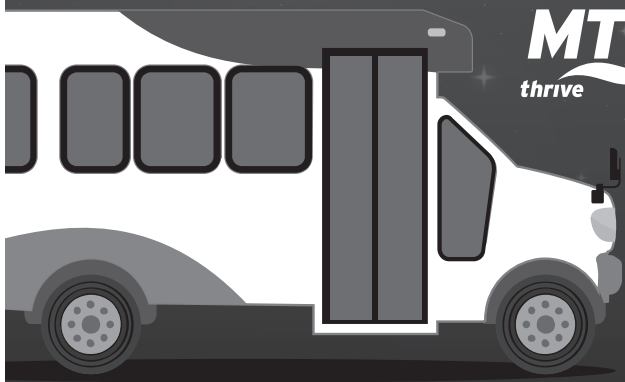

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