

# BANKS of the Boneyard

Urbana, IL

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# BANKS RETURNS

### Letter from the Chair

By Jacob Levine

First, I'd like to thank Yanni, Minh, and Krish for all of the effort they put into bringing back Banks for the first time since the pandemic and for the first time in print form in over a decade. ACM has greatly expanded since the last edition, making banks' mission all the more important: with over 42 hours per week of activities between all of our SIGs, committees, and events, it's nearly impossible for anyone to fully follow all of what's going on at ACM.

I'd also like to congratulate Cole and Shreenija on running a successful R|P 2025. R|P brought in a notably diverse set of speakers, and their career fair brought a wide array of companies to Siebel including OpenAI, Jane Street, and Qualcomm. Thank you to everyone who helped make this event a success. Additionally, I'd like to congratulate Cameron, Minh, and Emma for bringing in over 125 teams for Fall CTF and Adya and Akshay for running the broadest corporate talks series in over 5 years.

Getting involved is the key to assuring ACM's help in pursuing your own interests. Feel free to stop by our office and talk to us, or you can email T4 at officers@acm.illinois.edu. I look forward to everything we do for the rest of this semester.

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**Weekly Social Hour** 

Every Friday · 5:00 PM - 6:00 PM · Legends

### **ACM Fall 2025 Rave Themed Bar Crawl**

November 13th · 7:30 PM · Around Campus

Join the ACM discord at https://acm.gg/discord for the most recent information!

# Get Featured in Banks!

Want to submit an article to Banks? Send your article to banks@acm.illinois.edu

# Editors

Yanni Zhuang Minh Duong

# Banks of the Boneyard Rises from the Dead!

**By Yanni Zhuang** 

After a long hiatus, Banks of the Boneyard is back and better than ever! We're excited to finally bring back our beloved student-run publication.

For those unfamiliar, Banks of the Boneyard (or just Banks for short) is a historically student-run publication managed by the ACM @ UIUC student organization. Its history can be traced back to the very inception of the ACM chapter itself, providing updates and expositions on the events and topics explored within the organization since 1984. Although Banks' publication schedule has always been about as predictable as the Urbana weather, records indicate that publication ceased completely in 2009. A brief revival attempt was made in 2017 in the form of a Medium page, but that effort quickly fizzled out as well.

So why care? Why are we spending our precious time reviving what was already a shaky tradition in a medium long past its expiration date? Surely, there are better uses of our time. Well, there are a handful of reasons we felt that the revival of Banks was justified.

Firstly, Banks was one of the only places to get a centralized view of what was happening within ACM. Past issues served as a conglomeration of updates from the overarching ACM organization, its SIGs, and its committees. For newcomers to ACM, it was a great way to get up to speed with the latest happenings. After the publication died out, this kind of information became progressively harder to find. Nowadays, past events only exist as notifications scattered across disjoint Discord servers and outdated websites. By bringing back Banks, we hope to make information about all the cool things our SIGs and committees are doing more accessible to all students.

Secondly, in keeping with the idea that Banks was a centralized place for updates, it also serves as a snapshot of what ACM was doing at any given time. By looking at older Banks articles, we can piece together ACM's history and evolution—from its humble beginnings as a small group of computing nerds seeking a community to tinker with, to the behemoth it is today: a very large group of computing nerds seeking a community to tinker with (but now with Google and LLMs). Being one of the oldest surviving technical organizations on campus, and being associated with an institution as deeply intertwined with the very founding of computing as a profession as Illinois, we ought to have a proper record of how students have engaged with the field. Unfortunately, as publication of Banks ceased in 2009, we have a knowledge gap in ACM history from 2009 to 2020. We hope that by bringing back Banks, we can maintain a written record of ACM's shenanigans for future generations to look back upon.

# **Reflections | Projections 2025 Recap**

By Cole Jordan

Reflections | Projections 2025 is officially in the books! The Midwest's largest student-run technology conference has concluded its 31st annual conference since it started in 1995. Hosted from Tuesday, September 16th to Saturday, September 20th, this year's conference featured speakers from a wide range of fields in technology, including startups, autonomous vehicles, and artificial intelligence. We also hosted corporate events from HRT, Qualcomm, Aechelon, and Capital One, with the goal of providing students the opportunity to prepare for their future careers. As a conference made for students by students, we know what our attendees are looking for and design the entire conference around it.

### The Name

**Reflections** | **Projections** has been the name of the conference since its inception in 1995; it was created to highlight the two main goals of the conference:

- **Reflect:** Take a look at the current state of technology and learn from innovators who have shaped the industry.
- Project: Apply skills and knowledge towards the future by networking with companies and preparing for one's career.

### The Theme

This year's **R**|**P** theme was inspired by **F1** and racecars. In addition to our designs for our website, app, posters, and social media, we also decorated the first floor of Siebel to match our aesthetic. This theme proved incredibly successful, introducing many new faces to the conference and getting them excited about our events. We also introduced a **leaderboard** for the first time, where attendees earn points by attending events. The top 50 attendees on the leaderboard each day unlocked exclusive prizes, including a car keychain, a car stress toy, and a beanie. This was another way to encourage attendance at our events and provide attendees with unique prizes! Our speaker theme was also "**Racing Into The Future**," with a specific emphasis on looking ahead to what the future of the industry will entail.

### **R**|**P** 2025 By The Numbers

With 40+ staff members, 10+ months of preparation, 13 guest speakers, 12 sponsors, over 1500 attendees, over 800 meals handed out, and over 100,000 social media impressions, this year's conference crossed the finish line at full speed!

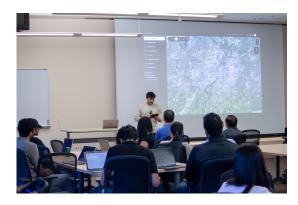
### **Mobile App**

For the first time in R|P history, our incredible development team deployed an official mobile app to streamline event op-

erations. Users were able to flag events, receive push notifications, track their leaderboard standings, view food menus, and get scanned in for events, food, and swag all in one place.

### **Driving Innovation Showcase**

This year, we hosted R|P's very first **startup showcase**, allowing students to pitch their startup ideas to **Qualcomm engineers** to get feedback. We had over 10 groups pitch their innovative ideas, from deepfake detection to increasing AI accessibility.



Students presenting their ideas during the Driving Innovation Showcase.

#### Career Fair

Our annual **career fair** brought hundreds of students to the first floor of the **Siebel Center for Computer Science**! Attendees had the chance to speak with representatives from companies like **HRT**, **Qualcomm**, **Caterpillar**, **Aechelon**, **Everfox**, **and Cloudflare**, and some attendees even landed internships and job offers from our career fair!



Students connecting with recruiters at the R|P| 2025 Career Fair.

### MechMania and PuzzleBang

R|P includes two additional events every year: **MechMania**, a 24-hour AI hackathon, and **PuzzleBang**, a week-long puzzle hunt! Both of these events are organized to allow attendees to have some fun and utilize skills that they learned. **MechMania** 

was sponsored by Caterpillar this year and had record participation as teams built a bot to beat a soccer game. **PuzzleBang** coincided with our racing theme and created numerous themed puzzles and even a mechanic-themed escape box, all organized by UIUC alumni.

We are so proud of all the work our staff members put into making this year's conference a success. While we might have reached the pitstop, we're already turning the corner to R|P 2026!



# **Oiskit Fall Fest**

By Sasha Levinshteyn, SIGQuantum Exec

It's that time of the year again: Qiskit Fall Fest is upon us! Qiskit Fall Fest is an IBM Quantum-sponsored month-long collection of quantum-related events. SIGQuantum kicked off our second ever Qiskit Fall Fest last Wednesday (October 15th) with an amazing talk on "Quantum Error Correction and Information Theory" by Sujeet Bhalerao. We had pizza, stickers, and quantum, what else could a quantum enthusiast dream to ask for? A whole *month* of quantum computing talks and Qiskit workshops? Turns out the answer is a resounding yes!

Throughout the next month, we will have a series of fascinating talks and events related to quantum computing and Qiskit (a coding language for quantum computers), culminating with an Open Source Quantum Hackathon. We invite all of you to join us to learn about quantum computing from a variety of perspectives at our upcoming events! All are welcome, regardless of background!

The past and upcoming events are summarized in the flier on the next page. We are still trying to figure out some final details, so keep up to date by joining the SIGQuantum Discord server. We would like to highlight a few events in particular: 1. IBM Speaker on Advanced Qiskit (date TBD, likely around November 9th) - We will be hosting a spectacular speaker from **IBM** to walk us through some advanced Qiskit programming. Do you want to learn how to code a quantum computer? If so, this event is for you! (We strongly encourage all to attend the Beginner Qiskit and Intermediate Qiskit sessions before this.) 2. Undergraduate Lightning Talks (date TBD, likely around November 9th) - A number of undergraduates are going to give short talks on subjects in quantum computing they find interesting. We invite all of you to come support these undergraduates! If you're an undergraduate interested in presenting (on

literally anything related to quantum computing), please reach out to SIGQuantum exec on our Discord. 3. Open Source Quantum Hackathon (November 15th - 17th) - Join us for the final event of Qiskit Fall Fest on November 15th! This is a chill kind of Hackathon. We're going to split into groups and choose something open source and quantum-related, for example, the Qiskit coding language itself, to contribute to. This will be a great opportunity to learn something new and show off your skills in time for our hackathon trip next semester!

If you have any questions about these events or would like to sign up to give a lightning talk, please reach out to us on Discord (@academicweapona or on the SIGQuantum Discord server).

As a reminder, everyone is welcome, regardless of background. Did you just hear about quantum computers for the first time and want to find out what all the buzz is about? Come to Qiskit Fall Fest! Have you been messing around in quantum computing theory or hardware and realize you need to learn some software? Come to Qiskit Fall Fest! Do you think all of this quantum computing buzz is bullshit? That's okay, come to Qiskit Fall Fest!

We look forward to seeing all of you at our events. Here's to an amazing second run of Qiskit Fall Fest!



# SIGRobotics at Cal Hacks 12.0 & Embodied AI Hackathon

By SIGRobotics

Last weekend (Oct. 24-26), two SIGRobotics teams set off for San Francisco to compete in Cal Hacks 12.0 and the Embodied AI Hackathon.

### **Embodied AI Hackathon**



Left to right: Stephen Zhu, Hasan Al Saeedi, Keshav Badrinath, Filip Kujuwa, Himank Handa, Sanjit Kumar, Aarsh Mittal, Leo Lin

Leo Lin, Himank Handa, Keshav Badrinath, Aarsh Mittal, Filip Kujawa, Sanjit Kumar, Stephen Zhu, and Hasan Al Saeedi from SIGRobotics placed first at the Embodied AI Hackathon hosted by NVIDIA, HuggingFace, and Seeed Studio. Their winning project featured a matcha-making robot, which they named *Performative*. Their project was a demonstration of embodied AI, a field that leverages novel generative AI methods to help robots learn how to perform real-world tasks.

The team engineered a setup with two SO-101 robotics arms to replicate the fine-grained motions part of the process of making matcha. They used NVIDIA's most powerful robotics foundation model, GR00T N1.5, a VLA (vision language action model) which receives image and natural language prompts as input and outputs a corresponding action (similar to how you would chat with ChatGPT, but instead of returning a paragraph, your robot performs actions for you). The inference to run this model on the robot was executed on an NVIDIA Jetson.

Though there were many hardware challenges along the way, including one of the arms and one of the cameras completely breaking, the team adapted and overcame these, fine-tuning and running their final model for the first time 20 minutes before the demo to the judges (the second time they ran it was during the demo!). Read more about this project here:



https://www.hackster.io/sigrobotics/embodied-ai-hackathonsubmission-sigrobotics-1st-place-f0e520

#### Cal Hacks 12.0



Left to right: Yash Yardi, William Po-Yen Chou, Tanish Mittal, Krish Konda

Last weekend, four SIGRobotics members, Yash Yardi, William Po-Yen Chou, Tanish Mittal, and Krish Konda, took off for San Francisco to compete in the World's Largest Collegiate Hackathon: Cal Hacks 12.0. The event brought together 2000+ competitors to the Palace of Fine Arts, with scenic views and a packed agenda for 36 hours of nonstop building, coding, and creative chaos. The team set out to build a robot that could draw what you imagined.

They call it MARC: Marker Actuated Robotic Controller, which takes natural-language prompts and turns them into real pen-on-paper drawings. The system uses an LLM for image generation to create artwork from a user's prompt and then converts it into precise motion commands. Then, an SO-100 robotic arm follows the commands to physically sketch the image.

After demoing MARC at Cal Hacks, the team won second place in the robotics track! The hackathon put the team's collaboration and design skills to the test, with Krish commenting, "This was a great experience, and developing MARC gave us inspiration to make this into something anyone can use." See more about this project here:



https://devpost.com/software/marc-marker-actuated-roboticcontroller

# **UIUC ICPC Triumphs**

By Enya Chen

This year, UIUC student team Ippatsu—Yuuki Sawanoi, Dilhan Salgado, and Zhikun Wang—has been crowned ICPC North America Champions!

They solved 12/13 problems, placing them 1st place out of 52 of the best teams among the best schools across across

North America, winning the Gold medal. Alongside this, they were the first team to solve 3 different problems, and the 1st place champions of the North America Central Division.

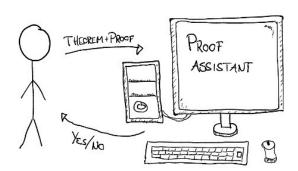
They proceeded onto the ICPC World finals in Baku, securing 20th out of 139 teams. They solved 8/12 problems, going against some the best teams across in the entire world, representing over 103 countries. Alongside this, they were the first team to solve problem F.

Both coaches Professor **Mattox Beckman** and PhD student **David Zheng**, were also awarded at the ICPC World Finals, in recongition of 5+ years of ICPC coaching.



# **Making Mathematics Open Source**

By Eyad Loutfi



In recent years, interactive theorem proving has revealed unexpected potential, both enhancing collaboration among professional mathematicians and making the field accessible to software engineers and those from less traditional academic backgrounds.

Many of the benefits of mathematicians adopting such technologies are obvious - digitizing a library of theorems would open it up to search and other automotive tools, which could then be used to assist in the building of more complicated modern proofs. Should we reach the point where modern research level proofs are built with or at least checked by a theorem prover, ensuring correctness would no longer be a matter of faith in the author or in the wait for peer review.

The technology is still in its infancy in adoption by the larger mathematical community, in part since to get a proof to make sense to a computer requires consideration of many smaller details - often hand waved away or treated more informally in real life. In turn, the technology is ways off from mathematicians feeling it's easier to work with proof assistants than without, and therefore worth the opportunity cost to learn. That being said, this comes closer to being a reality the more automation there is and the more mathematics gets digitzed.

Great strides are already being seen - a library called mathlib for the theorem prover Lean has seen over half the standard undergrad math curriculum programmed into it the last few years (as of writing, it contains 116,770 definitions and 236,001 theorems). Several laborious proofs have also been formally verified, and last year, a notoriously difficult problem - the value of the fifth busy beaver number was proven specifically in the rocq theorem prover. Not just that, but it was done by a group that included many non-mathematicians.

### **Background**

The busy beaver function is one which gives deep insights into computability, as the nth busy beaver is the maximum number of steps a machine with n rules can take before halting. This means if you know the nth busy beaver and your program runs for longer than that, that program is guaranteed to run forever. At first glance, this might suggest a workaround to the famously uncomputable halting problem, until one learns that this function too is uncomputable. Uncomputable here means that there cannot exist any algorithm that can take any input and spit out the corresponding output, and it shows up constantly in the theory of computation to remind us of the expressive power and limitations of what computers can and can't do. Therefore, it is not even a given that we'll always be able to find the next busy beaver number, and the difficulty certainly explodes to a tremendous degree with each value that has been found.

With BB(1), there are only two possible simple cases one need look at, whereas with BB(2), there are over 6000. That said, automation can quickly be used to prove its value is 6. With 3 rules, there are millions of possible machines, and billions for 4. At the very least for 2 and 3 rule machines there are few endlessly looping machines - once one arrives at 4 the number spikes to thousands. Still, through meticulous case analysis the 4th busy beaver was eventually identified at 107 - and as a testament to its progressive difficulty, the 5th busy beaver in turn has eluded researchers for the last 40 years.

The result was finally obtained at 47,176,870. What's more amazing is that this result, conjectured by professional mathematicians, ultimately was found by an online community who was working to verify their partial results in rocq. That group that had grown to around 20 researchers featured many from non-traditional academic backgrounds outside the mathematical community. The final proof itself was found and formalized in 40,000 lines in rocq by an anonymous discord user named mxdys - whose background very little is known about.

Developments like these show it's an exciting time for interactive theorem provers. They demonstrate the possibility that anyone, professional or not, might be able to collaborate on theorems as a legitimate possibility in the near future - an exciting possibility!

## Why NLP Matters More than Ever

By Kush Bhardwaj

You have probably heard of the term "natural language processing." Maybe you think of it as a buzzword - isn't it just ChatGPT, or a subset of artificial intelligence? However, it is a lot bigger than that. NLP is not just a subset of AI; it is the layer that makes AI usable by humans. It is the reason you are able to interact with the AI models you love and use. At its core, NLP is about teaching computers to interpret, structure, and generate language in a way that captures meaning and intention. It is not about flashy demos or the "state-of-the-art." Rather, it is about modelling and making sense of the understandability and interactability itself. So if NLP is bigger than chatbots, what does it actually do, and why does it matter for computer scientists today?

At the practical level, NLP enables computers to extract meaning from unstructured language. A good NLP model would have to effectively manage the following from users:

- The semantics of the sentence the user intent and what the sentence actually means
- The syntax of the sentence the grammatical structure of a sentence to understand how words relate to each other
- Be able to articulate and understand the output

Some examples of effective NLP models would be speech-accessibility tools, document summarization, translation models, and more.

NLP models are also transforming many different industries, and are quickly becoming endemic to the workplace. It is used in the business industry, where it is being used to automatically process vast amounts of data, like customer review data, legal documents, and more. It is also often used in the healthcare industry - aiding in diagnostics, accelerating drug discovery by finding connections in literature, and streamlining administrative tasks like medical coding.

As these models are normalized and become endemic to the workplace, it has become more important to fundamentally understand how they work. Understanding the underlying mechanisms (e.g., transformer architectures) allows professionals to properly integrate, customize, and maintain these systems for specific company needs. Additionally, it is also crucial to realize the pitfalls as well. Models are only as good as their training data; if the data contains human biases (e.g., racial, gender), the model will perpetuate and even amplify them. This can lead to unfair or discriminatory outcomes in hiring, lending, or legal contexts. On top of that, it is not uncommon for models to sometimes lose context or "hallucinate"

(confidently generating plausible-sounding but incorrect information).

Overall, NLP is a very important layer between the human and the AI models. It is the reason AI models are able to understand human input, and vice versa. However, when it comes to AI models, the future of work means not just that the use of NLP tools will explode, but there is also a responsibility to understand their inner workings and limits.

# **Gamebuilders Updates!**

By Ethan Wang

So far, we've already hosted our semesterly game jam and workshops on Blender and Shaders, and are planning ahead for future workshops and our industry panel.

In terms of semester projects, our members have been hard at work, and we're happy to say that the games are starting to take flight! We feel that our games will truly be on an island of their own in terms of quality and are hard at work on the Unity files to try to make these ideas come to life! We're hoping to release the list of finished games ASAP for our final showcase for the semester.

# **Update from SIGGraph!**

By Owen Siemons

SIGGRAPH is having a great semester! We have had a handful of hands-on workshops in a wide range of topics including raytracing, Gaussian splatting, Cel shading, and Cellular Automata. Accompanying a few slides explaining the topic, we supply a Shadertoy project for every member to either mess around with or iterate on what we talked about in the workshop. At the end of each meeting, members show off what they created to the rest of the club in an interactive environment. Throughout the semester we will continue to host these workshops while also making space for project meetings.

We have started development on a spatial audio visualizer using an AR headset and a unified backend abstraction for both OpenGL and Vulkan APIs to make interfacing with them easier for any future SIGGRAPH projects. The spatial audio visualizer project presents a lot of unique challenges to it including

triangulating audio to find the source, decomposing audio signals based on distances, and needing to utilize machine learning to classify noise. The backend project is unique because an abstraction from these rendering APIs is not commonly done, and when it is, it is not typically publicly accessible. This means a lot of meaningful design decisions are being made daily and every contributor is learning about many technical aspects of creating computer graphics from scratch.

We meet every Sunday at 2PM! Join our Discord (find it at https://www.acm.illinois.edu/) for more information because we would love to have you!

# **SIGEcom Updates!**

By Nate Levkov

This semester, SIGecom has been diving deep into the intersection of computer science and economics. Each week, we've presented on topics ranging from algorithmic trading and optional membership design to game theory in AI, dynamic pricing, and platform economics—exploring how algorithms shape the markets and digital platforms we interact with every day.

Beyond presentations, we're shifting toward hands-on experimentation. We've kicked off two new projects: one focused on developing a program tailored for simulating prediction markets, and another centered around building an algorithmic trading system. These initiatives give members the chance to explore how data, modeling, and automation can come together to simulate and influence real-world markets.

A highlight this semester is Traydner, developed by Evan Doubek. Traydner is a learn-by-doing trading simulator where users can practice trading stocks, crypto, and forex using a risk-free paper wallet. It's an exciting way for members to experiment with strategy and market behavior without financial risk.

At SIGecom, our goal is simple: to get people's hands dirty with real projects—no experience required. Whether you're an economist curious about coding or a CS student fascinated by markets, everyone is welcome to join and learn by building.

# **Your Horoscope**

By EMMA HARTMAN

### How are you holding up this semester?

**Aries:** You started studying for your midterms at 2 a.m., but you drank three Monsters and "locked in", so they'll probably come back okay?

**Taurus:** You've been camped out in the ACM back room for long enough that you befriended the janitors. You're seriously considering just taking the night shift with them.

**Gemini:** When you started studying the night before your midterms, you said you'd just "skim the slides". Instead, you read 300 pages of the course textbook. Only the parts you didn't read were on the exam.

**Cancer:** You've migrated your notes from Goodnotes to Notion to Org-mode, and halfway through turning it all into Anki cards, you finally realized the problem might not be your workflow.

**Leo:** After a rough midterm, you loudly declared that you "don't even care about grades", then immediately went back to checking Canvas four times an hour.

**Virgo:** You made a study schedule so detailed it could be an incident response plan. Unfortunately, you finished it the day of the exam.

**Libra:** You can't decide which midterm to study for, so you're starting drama in all of their Campuswire forums. Somehow, this feels more productive in the moment.

**Scorpio:** You're carrying three group projects on your back after they promised to pick up the slack this semester. You'll never forgive them for what they've done.

**Sagittarius:** You told your friends you'd meet them at Grainger, but you're currently at KAMS attempting to organize an integration bee. It's going surprisingly well!

**Capricorn:** You haven't left your room in four days, but on the bright side, your GitHub contribution graph looks stellar!

**Aquarius:** You built a comprehensive script in an attempt to optimize your workflow, but now you're spending all your time debugging it.

**Pisces:** You've been working on side projects and kind of forgot your homework exists. You've convinced yourself that your final will "balance out" your missing homework assignments. It will not.

# **ACM @ UIUC Directory**



### **ACM**

Chair: Jacob Levine Vice Chair: Sherry Long Treasurer: Adhi Thirumala Secretary: Krish Gangal Website: acm.illinois.edu Discord: acm.gg/discord

Instagram: instagram.com/acm.uiuc

Officers of the overarching ACM@UIUC organisation.



### **Infrastructure Committee**

Chairs: Dev Singh, Kay Rivera Website: infra.acm.illinois.edu

The Infra Committee is responsible for managing ACM @ UIUC's core software engineering and infrastructure efforts, both on-premises and in the cloud. Our main project is ACM core, a self-service platform for exec council members to handle event management, ticketing, access management, membership servicing, link shortening, and more.



### **Corporate Committee**

Chairs: Adya Daruka, Akshay Vellore

The corporate team handles communication with ACM@UIUC's sponsors. Our current sponsors include PrairieLearn, Atlassian, Capital One, Citadel, RandomLabs, Visa, and KLA.



### **Academic Committee**

**Chairs:** Amol Shah, Yanni Zhuang **Website:** academic.acm.illinois.edu

The academic committee organizes review events for CS courses and interfaces with professors to enable student success in courses.



### **Social Committee**

Chairs: Ashika Koripelly, Naomi Lin

The social team organizes fun events for ACM@UIUC such as picnics, activity weeks, game nights, and Happy Hour.



## **Reflections | Projections**

**Chairs:** Cole Jordan, Shreenija Daggavolu **Website:** reflectionsprojections.org/

We provide a forum to share and learn about progress in computer science, with industry and academia tech talks, workshops and events for attendees, Mechmania, and Diversity × Tech.



## **Marketing Committee**

Chairs: Jasmine Liu, Veda Fernandes

The marketing team organizes social media and branding for ACM@UIUC.





### **Mentorship Committee**

Chairs: Alice Fan, Mitali Ahlawat

The mentorship team organizes mentorship programs for ACM@UIUC, welcoming everyone to CS @ Illinois.

### HackIllinois

Chairs: Lucy Wu, Sada Challa Website: hackillinois.org

HackIllinois is UIUC's premier student-run hackathon. Each spring, nearly 1000 students come together for one weekend to learn and create innovative hacks such as websites, mobile apps, and many more!



### **GameBuilders**

Chairs: Ethan Wang

Meetings: Wednesdays, 7:00 PM-9:00 PM, SC 1302

**Website:** gamebuilders.acm.illinois.edu/ **Discord:** discord.com/invite/2rND6FT

Gamebuilders is a SIG focused on game development. We host game jams, game dev workshops and sometimes industry panels, but the main focus of the club is our semester projects, which are proposed and worked on by our members. Project leads will then present their project at our MVP and Final showcase to the rest of the club and any attendees! Gamebuilders works on all aspects of game development, including Art, Music, and Game Design, and is open to all skill levels, so don't be afraid to join even with no experience!



### **GLUG**

Chairs: Jenna Fligor, Krishnan Shankar

Meetings: Wednesdays, 6:00 PM-7:00 PM, SC 1302

Website: lug.acm.illinois.edu/ Discord: discord.gg/sWD3zxPyc2 Matrix: matrix.to/#/#gnulug:matrix.org

GLUG is dedicated to learning about the fundamentals of operating systems, with an emphasis on Linux and UNIX-based operating systems. We talk about a wide variety of concepts - some examples include self-hosting, service managers, Linux distros, networking, privacy/cryptography, and general news in the free and open source software (FOSS) community. If any of these topics sound interesting to you, join us on Wednesdays from 6-7pm at Siebel CS 1302! Everyone is welcome, all talks are beginner-friendly, and you definitely don't have to use Linux to show up. Our meeting schedule and Discord/Matrix servers are linked on our website, at https://lug.acm.illinois.edu.



### **ICPC**

Chair: Canchen Li, Daniel Zhang, Enya Chen, Johnathan

Tong, Ryan To

Meetings: Thursdays, 5:00 PM-7:00 PM, SC 1302

Website: icpc.cs.illinois.edu/ Discord: acm.gg/icpc\_discord

SIG-ICPC is a special interest group for the International Collegiate Programming Contest (ICPC) that runs under the ACM chapter at UIUC. The ICPC is an algorithmic programming contest for college students. It is the oldest, largest, and most prestigious programming contest in the world. More than 50,000 students participate in three-person teams representing more than 3,000 universities.

Here we foster a friendly environment for students to practice and train for not only ICPC, but also to improve their programming and problem solving skills. These skills prove to be beneficial in technical courses, programming interviews, and real life applications.

In the past 17 years, our UIUC has advanced to World Finals 16 times. Let's continue this legacy!

For more information, visit our website at icpc.cs.illinois.edu or join our Discord server at discord.gg/icpc-uiuc.



### **SIGAIDA**

Chairs: Kaavya Mahajan, Rishi Mulchandani

Meetings: Mondays, 6:00 PM-7:30 PM, Everitt 1306

Website: aida.acm.illinois.edu Discord: acm.gg/aida\_discord

Ever wondered how AI actually works - or better yet, how to make it work? That's what we do at AIDA. We explore the world of artificial intelligence and data analytics through hands-on projects, workshops, and demos that turn abstract concepts into real results.

Our beginner track, MLScope, walks you through the fundamentals of AI and machine learning with guided sessions and practical mini-projects - from predicting housing prices to analyzing massive textual datasets with large language models. For those ready to level up, our project track dives into real-world AI applications. This semester's lineup includes six active projects, covering everything from sustainable recycling assistants to financial reasoning and sports analytics.

Whether you're brand new to AI or already training deep learning models in your sleep, AIDA's got something for you. Come learn, build, and collaborate with a group of curious minds who think data is cool (because it is).

Mondays at 6. Be there :D



### **SIGARCH**

Chairs: Alex Gallagher, Pradyun Narkadamilli, Pratyay

Gopal Reddy Rudravaram

Meetings: Wednesdays, 5:00 PM-6:00 PM, ECEB 3015

Website: sigarch.net/

**Discord:** discord.gg/Mx8R389hWz

SIGARCH at the University of Illinois Urbana-Champaign is a student-run group dedicated to exploring all things computer architecture — from processors and memory hierarchies to emerging trends in hardware design. We bring together students passionate about understanding and building computing systems through weekly discussions, paper reviews, and hands-on workshops. Whether you're diving into your first architecture project or already designing custom chips, SIGARCH provides a collaborative space to learn, share ideas, and grow alongside others who love hardware.



### **SIGCHI**

Chairs: Aditi Shrivastava, Ethan Nguyen, Josephine Lee,

Maya Zubak

Meetings: Mondays, 5:00 PM-4:20 PM, SC 2405

Website: sigchi.acm.illinois.edu/ Discord: discord.gg/XRShsPCAQ3

SIGCHI is the special interest group for Human-Computer Interaction. We explore ways to design and make technology that solves problems or enhances the human experience in small ways. Every year, we focus on designing and building a project that incorporates principles of human-centered design and present it at Engineering Open House!



### SIGecom

Chairs: Bhargav Sampathkumaran

Meetings: Mondays, 7:00 PM-8:20 PM, Loomis 139

Discord: acm.gg/ecom\_discord

SIGecom is ACM's Special Interest Group in Economics and Computation. At SIGecom, our goal is simple: to get people's hands dirty with real projects—no experience required. Whether you're an economist curious about coding or a CS student fascinated by markets, everyone is welcome to join and learn by building.



### **SIGma**

Chairs: Alex Broihier, Sasha Levinshteyn, Franklin Zhang,

Ian Chen, Porter Shawver, Sam Ruggerio

Meetings: Mondays, 6:00 PM-7:00 PM, SC 1302

Website: cstheory.org/

**Discord:** discord.gg/Sxf3h3pBbv

SIGma is the Special Interest Group for Math and Algorithms here at UIUC. We cover everything and anything in the CS theory field. Most of our regular meetings consist of members presenting or discussing topics they're interested in. All backgrounds welcome!



### **SIGGRAPH**

**Chairs:** Eero Dunham, John Barry, Owen Siemons **Meetings:** Sundays, 2:00 PM–3:00 PM, SC 1302

Website: siggraph.acm.illinois.edu/

Discord: discord.com/invite/a5U333fNMX

SIGGRAPH is UIUC's main RSO about all things computer graphics. We host breadth talks, demos, project development, alumni talks, research paper deep-dives, and social events. Whether you are a beginner or experienced beyond your years, there is a place for you in SIGGRAPH to express your interests and meet like-minded people.



### **SIGMusic**

Chairs: Aslan Wang, Emmett Quan, William Lei Meetings: Tuesdays, 6:30 PM–8:00 PM, CS 1304

Website: sigmusic.acm.illinois.edu/ Discord: acm.gg/sigmusic\_discord

SIGMusic focuses on discussions and projects surrounding digital audio processing, audio hardware, and electroacoustic techniques for the creation of music. Under the leadership of Emmett Quan (CS + Music, '28) and William Lei (CS + Music, '28), the organization is currently creating digital guitar pedals using the Daisy framework. All are welcome to come to weekly Tuesday evening meetings, (6:30-8:00pm in Siebel CS 1304), regardless of experience with computers or audio! Join the Discord server to stay in the loop.





### **SIGNLL**

Chairs: Kush Bhardwaj, Ryan Varghese, Saad Ahmad, Vinay

Rajagopalan

**Discord:** discord.gg/wwYeewYkCG

Hello, we're SIGNLL, the SIG dedicated to NLP! Right now, our officers are Kush Bhardwaj, Saad Ahmad, Ryan Varghese, and Vinay Rajagopalan. Each semester, we give our members an introduction into the world of NLP by helping them create the NLP-related projects that they've always wanted to make! And at the time of writing, we've just started working on those projects! Some of the problems our members are working on include making small language models for specific tasks, a sports betting assistant, a resume parser, and more! If you're worried about missing out, boy, do I have great news for you! Even though we've already started working on projects, you can still join! Just show up to our meetings (6-7 pm every Monday, in the Siebel Center for CS room 1304!) If you want, you can join one of the existing projects, or, if you have your own idea, feel free to form your own group and work on your own NLP-related project!

### **SIGPLAN**

Chairs: Eyad Loutfi, Ethan Zhang

Meetings: Wednesdays, 5:00 PM-6:00 PM, Siebel 1302

Discord: acm.gg/sigplan\_discord

Interested in having a programming language debate? Want to discuss your favorite formal verifier? Maybe even learn some category theory while you're at it?

Sigplan is the place to casually meet other fellow PL enthusiasts (often to some pizza: D) and discuss related topics, be it in compilers, functional programming, formal verification, or mathematical logic and type theory (with its endless applications to both programming and math, or even the tangentially related but deep discussion of what mathematics even *is*). If these topics seem daunting, don't worry since all are welcome to join with or without background, and we encourage anyone to come learn!

Besides the opportunity for socials and presentations on intriguing and requested topics, anyone is further welcome to give their own presentations. Whether to share a related topic they're passionate about, or as motivation to encourage self learning and practice communication of said topics.

Sigplan meets biweekly, with the next meeting on December 3rd. We encourage joining our discord to stay up to date with announcements, (lecture and guest speaker days will also be recorded and posted there). If there are any questions, feel free to reach out to one of our two chairs either by email or discord.





### **SIGPolicy**

Chairs: Daniel Elliott, Pranav Rajpal, Camille Wu

**Meetings:** Tuesdays, 7:00 PM–8:00 PM, Biweeekly, Siebel

CS 3401

**Website:** sigpolicy.acm.illinois.edu/ **Discord:** discord.gg/gKjMH54YBF

At SigPolicy, we aim to bring the tech events, news, and debates of the world to everyone at Illinois — that means you! Our meetings cover critical topics in tech, from chip control to social media funneling to online gambling. We do the research, so all you have to do is show up, listen to us for a few minutes, and dive into the discussion — no previous knowledge or experience with the topic needed! Coming up, we are having a social on the 4th, with Manolo's and Mafia, to which everyone is welcome, and then diving into malicious AI — where we see it, what it means, and what we can do about it — on the 18th!

### **SIGPwny**

Chairs: Cameron Asher, Emma Hartman, Minh Duong,

Michael Khalaf, Nikhil Date, Sam Ruggerio Meetings: Sundays, 5:00 PM-6:00 PM, SC 1404

Thursdays, 6:00 PM-7:00 PM, DCL 1310

**Website:** sigpwny.com **Discord:** discord.gg/cWcZ6a9

Learn how to hack! SIGPwny is the Special Interest Group for Information Security. Our General meetings focus on the fundamentals of security, including topics on binary exploitation, web hacking, and cryptography. We also play in hacking competitions, known as Capture the Flag (CTF). Our Embedded Team focuses on hardware hacking and embedded systems security. The Purple Team focuses on both offensive and defensive security techniques. Join our Discord at https://sigpwny.com/discord!



### **SIGQuantum**

Chairs: Sasha Levinshteyn, George Huebner, River Chen,

**Shreyes Bharat** 

Meetings: Wednesdays, 6:00 PM-7:00 PM, SC 1304

Website: sigquantum.com

**Discord:** discord.gg/PmaXeHPaFs

SIGQuantum is the Special Interest Group for Quantum Computing and Information here at UIUC. We cover everything and anything in the quantum computing field from quantum hardware to quantum software to quantum theory. Most of our regular meetings consist of members presenting or discussing topics they're interested in. All backgrounds welcome!





### **SIGRobotics**

Chair: Leo Lin, Manav Chandaka, Reid Faistl, Saketh

Kantipudi

Helper: Advait Patel, Gloria Wang

Meetings: Saturdays, 1:00 PM-3:00 PM, SC 2405 and 1131

**Website:** sigrobotics.acm.illinois.edu/ **Discord:** discord.gg/Rj75e5qGT3

SIGRobotics is like an open robotics lab for undergraduates! We have 40+ members across 9+ projects that include developing our own mobile robots, training robot arms with machine learning, exploring brain-computer interface applications, as well as projects tied to research-based competitions such as F1Tenth and RoboCup. We also attend a variety of robotics hackathons, and host recruiting events with robotics or robotics-adjacent companies including Neuralink this fall and General Biological last spring.

Many of our projects do not require any prior experience, and we're open to all majors, so feel free to come and learn about robotics! We also recently moved in to our new lab space in room 1131 in Siebel CS, and frequently host openhours where members can come in and work on their projects. Join our discord to learn more!

# **SIGtricity**

Chairs: Ansh Verma, Noah Rockoff Website: sigtricity.acm.illinois.edu/ Discord: discord.gg/4yRWQuzhEV

Sigtricity is the first SIG specializing in hardware and electrical engineering, while also incorporating CS and programming into hardware. We aim to bridge the gap between students who want to take on projects to build their resume and skill set, but do not know where to start. We provide explanations and directions that can be understood by any major or level of experience and provide all the parts. All you need to do is show up and be willing to learn.