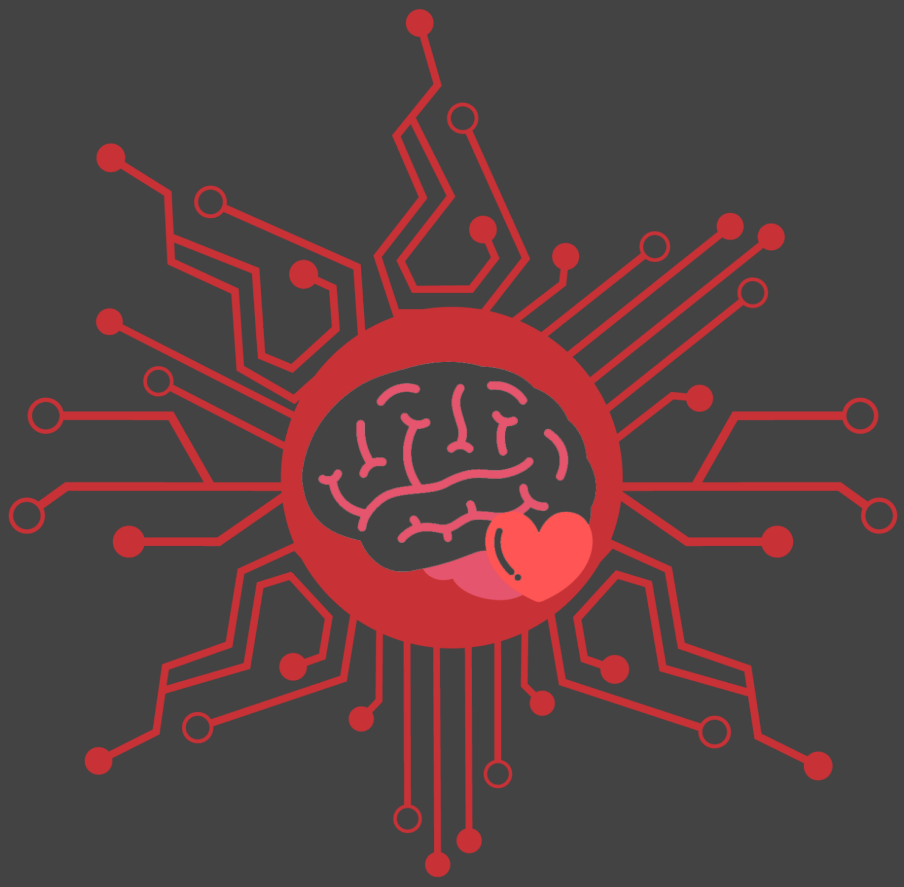


ROBOTECH 2023

About

RoboTech is a unique kind of hackathon meant to mix hardware and software under the theme of robotics!

Students will participate in one or more of the competition tracks: Design, Robot Body, Circuitry, and Software. The Design track will be a presentation of your just ideas to a panel of judges, while the other three will be a presentation of your actual creation. You are free to participate in only the Design track, only another track, or any combination! This year, RoboTech's challenge is to create a project focused on wellness (mental and physical health).

This packet will serve as a living document (details may change during the hackathon) to help you navigate all the different things we will be offering at this year's event. We can't wait to see where your creativity takes you this weekend, and all the fun you'll have at the in-event workshops and activities.

Links

- Hackathon Portal (Where you applied and will find check in QR code)
- Static Landing Page (Page describing the hackathon)
- Discord (Primary event communication)
- Devpost (Project submission)

Event Discord

Discord is a voice, video and text communication service used by over a hundred million people. Here is a video to help get you acquainted with the platform. You can download the desktop or mobile app here: https://discord.com/download or just use the browser.

To join the RoboTech Discord, click this link Discord

Staff

Leadership Team - Please direct any questions or concerns that you cannot answer to a member of our leadership team. We are easily identifiable by the [Admin] tag in Discord, and at least one of us will be available 24 hours a day during the event:

- Aaron Rieck - Event Director
- Samay Chandna - Logistics
- Ian Knight - Technology
- Aidan Stickan - Marketing and Hacker Experience
- Joshua Chio - Corporate Relations
- Zachary Scott - Finance and Overnight Safety

Code of Conduct

As a participant of RoboTech, you have signed and agreed to the MLH Code of Conduct as part of your application. All participants are expected to uphold this Code of Conduct throughout the event and can face consequences such as expulsion for any act of misconduct. To review the full Code of Conduct, please visit the MLH website HERE.

If you would like to report an incident, you can

1. Reach out to any RoboTech Staff Member on Discord
   (all RoboTech members are denoted [Staff] <Name>)
2. Email gatechieee@gmail.com

Our goal is for RoboTech 2022 to be an inclusive and enjoyable experience for all, so don't hesitate to contact us if you feel uncomfortable in any way.

Arrival

Check In

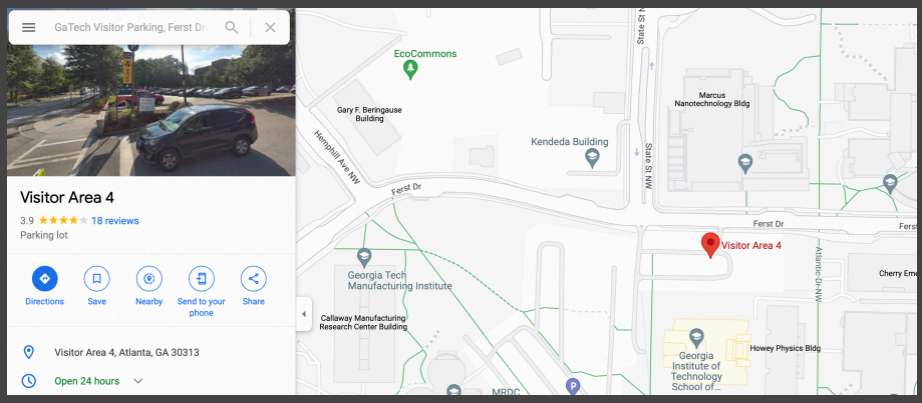
Go to your Hackathon Portal and find the QR code under checkin. This will be scanned at meal time and at check-in to verify you are a participant.

KLAUS ADVANCED COMPUTING BUILDING
266 FERST DR. NW, ATLANTA, GA 30332

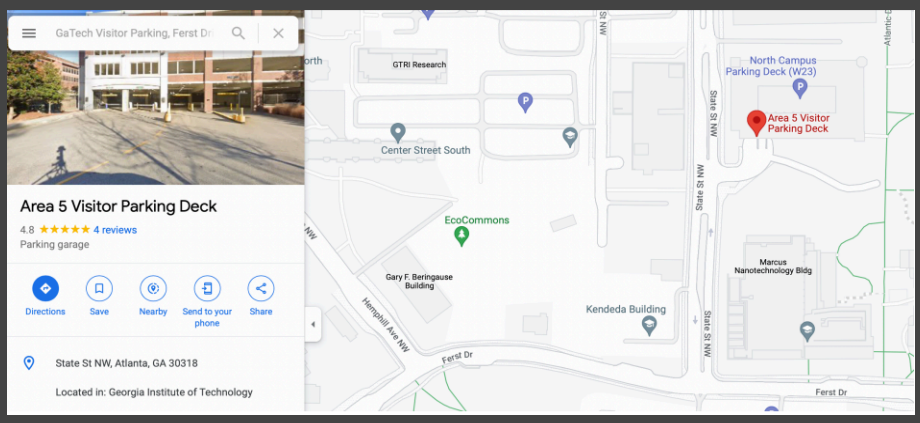
ENTER THROUGH MAIN DOORS TO KLAUS ATRIUM

Parking

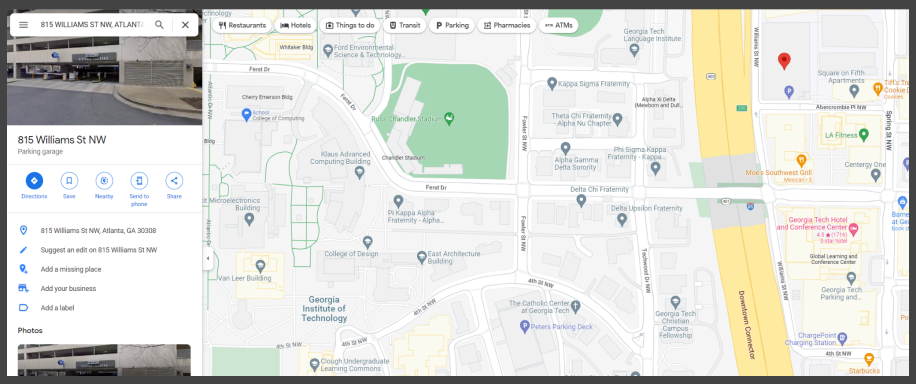
VISITOR AREA 4, ATLANTA, GA 30313 (Preferred Location)



AREA 5 VISITOR PARKING DECK
STATE ST NW, ATLANTA , GA 30318



CENTERGY PARK
815 WILLIAMS ST NW, ATLANTA , GA 30309



Schedule

Day	Time	Event Title - Description	Location
Fri	5:00 PM	Doors Open	Atrium
Fri	6:30 PM	Opening Presentation	CoC 016
Fri	7:30 PM	**Dinner / Team Formation (Hacking Starts)**	Atrium
Fri	10:00 PM	**Snacks**	Atrium
Fri	10:30 PM	Intro to ROS by RoboJackets	
Sat	5:00 PM	The Design Round: How to Pitch Your Project by KSU Sales	
Sat	9:00 AM	**Breakfast**	Atrium
Sat	10:00 AM	Hive opens	
Sat	11:00 AM	Soldering Workshop by The Hive	
Sat	12:30 PM	**Lunch**	Atrium
Sat	1:30 PM	Intro to Internet of Things with ESP32 by GT IEEE	
Sat	3:00 PM	Intro to Machine Learning by GT IEEE	
Sat	5:00 PM	Hive closes	
Sat	5:00 PM	The Design Round: How to Pitch Your Project by KSU Sales	

Sat	7:30 PM	**Dinner**	Atrium
Sat	10:00 PM	Snacks	Atrium
Sun	9:00 AM	Project submissions due (Hacking Ends)	
Sun	9:00 AM	**Breakfast**	Atrium
Sun	9:30 AM	Judging Room Assignments Announced	
Sun	10:00 AM	Judging starts	
Sun	12:00 PM	Judging Ends	
Sun	12:30 PM	**Lunch**	Atrium
Sun	1:30 PM	Award Ceremony	

Hardware Room

A hardware room will be maintained during the hackathon, where you can get supplies for building your projects. You will be given a sheet detailing anything you are expected to return.

It will not open until after dinner!

- Keep your sheet! You should turn it in with your project during judging and everything you borrowed should be accounted for.
- If you want to borrow more items, bring your sheet!
- The sheet is not used in the HIVE or other makerspaces, it's only for us.

Project Submission

Devpost Requirements

https://robotech2023.devpost.com/

1. You must submit a video of less than 2 minutes with your submission on DevPost.
    a. Your device, design, or app must be clearly visible in the video.
    b. You must show your product, regardless of completeness.
    c. The video should be a demonstration or explanation of the key features of your project.

2. You must submit a description of your project on DevPost.
    a. Clearly state the tracks you are submitting your project to.
    b. Describe project features, reinforced by the video.

3. If there is code in your project, you must submit a public GitHub repo.
    a. Any contributors to your repository must be listed on DevPost.
    b. Forked projects must present a significant addition of functionality.
    c. Your code must adhere to our cheating policy.

Cheating Policy

- All project submissions must have been created solely during the time period of the hackathon.
- If the project is an extension of an existing project, only the additional features that were created during the hackathon. It must be abundantly clear what is being submitted for consideration.
- The project may not have been submitted elsewhere, such as an assignment or another hackathon.
- The project must be the sole work of the members (up to 4) of the submitting group
- A citation (link + credit) must be included for any imported open source work that is used directly (i.e. code that is copied and pasted into the codebase rather than imported as a library).

Any submission that does not meet the requirements of the cheating policy will be disqualified from competition and consideration for prizes.

Judging

General Criteria

Generally consider these questions for rubric items (you don't have to directly answer them anywhere, they are just meant to stimulate thinking):

- **Impact/Theme Alignment:** Does your project have the potential to improve the lives of a large and/or underserved population of people? Are the needs of those people well considered? Does your presentation make that impact clear to an uninitiated audience?
- **Ingenuity:** Does your project add or introduce something new and valuable to the world?
- **Complexity:** How did you utilize or attempt to utilize technology in your project? Does it reflect technical skill and understanding? Remember that simplicity can be a form of complexity, in that it can show a carefully considered or elegantly planned project.
- **Execution**: Is the work you completed during the hackathon substantial? Is the work you completed proportional to your goals?
- **Learning**: Did you grow as an engineer during this hackathon? Did you grow as a team member or innovator?

Design

Category	Highest Score - 5	Highest Score - 1	Weight
Theme Alignment	Project is primarily concerned with improving physical and/or mental health.	Project is unrelated to improving physical and/or mental health.	40%
Ingenuity	Highly innovative concept or key principles unheard of before	Already exist and/or very little innovation	15%
Execution	Presentation materials paint a complete picture of the product, anticipates questions, and give background to uninitiated viewers.	Presentation materials are incomplete.	15%
Feasibility	Final concept presents a simple and clear possible implementation, guarantees quick	Final concept is technically or economically unfeasible (e.g. incompatible with current	15%

	adoption by users, pays for itself, or makes a strong business use-case	technologies including hardware, software etc.)	
Impact	Highly disruptive project offering a unique solution in terms of improving health.	Attempted project was unambitious and has little impact on improving health.	15%

Body, Circuitry, and Software

Category	Highest Score - 1	Highest Score - 5	Weight
Theme Alignment	Project is primarily concerned with improving physical and/or mental health.	Project is unrelated to improving physical and/or mental health.	40%
Ingenuity	Highly innovative concept or key principles unheard of before	Already exist and/or very little innovation	15%
Execution	Work shown during the hackathon brought the project to completion with key features intact and if applicable, future additions are clearly laid out.	Work shown during hackathon was minimal.	15%
Complexity	Attempted project is technically impressive and challenging.	Attempted project was unambitious or technically limited.	15%
Learning	Learning is described in the project's Devpost description, and team members showed significant growth (technical or soft-skills).	Learning is not described in the Devpost description.	15%

Additional Resources

Emergencies

Georgia Tech Police Department (Preferred): 404-894-2500
Or call, 911

After you call the police, please let an event organizer know as well (Discord @admin or in-person).

In addition to the above, there will be a police officer stationed outside the Klaus building in the event of a serious emergency, 8 PM to 8 AM. Please alert them as well as a member of our leadership team if something arises.