

# IEEE Internal Projects Competition

Week 1: Competition Overview



# Meet the Team



#### Matias Guillen



Project Chair Sophomore - Electrical Engineering Internal Project Competition - Lead Contact: vector8925

### Erik Siegman



Project Committee
Sophomore - Computer Engineering
Internal Project Competition - Sub-Lead
Contact: eriks0527

### Yousef Awad



Project Committee
Sophomore - Computer Engineering
Internal Project Competition - Sub-Lead
Contact: quil180

# Meet the Team



### Tino Hernandez



Project Committee
Sophomore - EE/CS/CPE/Delusion
Internal Project Competition - Sub-Lead
Contact: vjmuzik





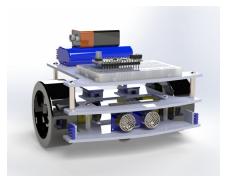
### Overview

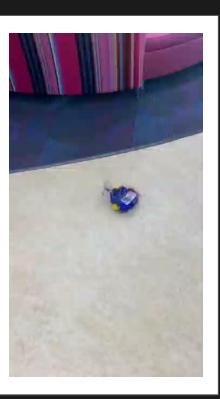
- Over the next **2 semesters**, work on a group project of your choice.
- There will be recurring meetings throughout the semester to meet with groupmates and work on the project, as well as to teach core electronics skills to beginners.
- Funding will be provided (\$25 Beginner/\$50 Advanced) by IEEE for each project.
- At the end of the 2 semesters, there will be a project showcase.

## What you can make? - Last years projects



### Micromouse









**LED Skateboard** 





### Beginner:

Who it's for: New members looking for a guided introduction to the electrical engineering profession

 Guidance in selecting a project, writing a BOM, prototyping, and reaching a completed design.

#### Advanced:

Who it's for: Members with prior electronics experience looking to receive funding and support for their projects

- Technical assistance from project leads
- Opportunity for more complex project

## What you can get it out of this experience?



# Great resume builder!

For fun!!

a project lead.





Group Collaboration
Awards





## Timeline and Important Dates

## Weekly Meetings - Estimated Timeline (Starting September 16th)

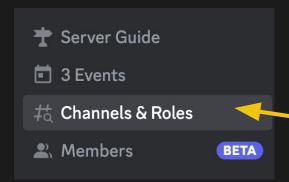
Week 1	Week 2	Week 3	Week 4	Week 5
Introduction	Microcontrollers	Fusion 360/Solidworks	KiCAD	Soldering/Prototypi ng

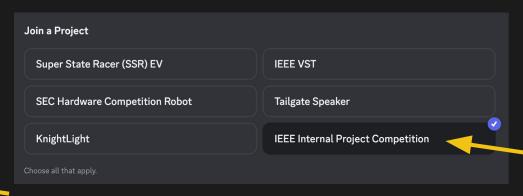


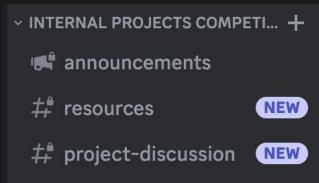


## How to join the Discord thread

#### From IEEE UCF server:







Future communication about meetings, deadlines, and general project discussions will be through these channels





## Project Ideas

### Beginner Projects:

- 10 Beginner Projects
- Air Quality Monitor
- Alarm Clock
- Nerf Turret
- Audio Visualizer
- Visitor Counter
- <u>Temperature-Controlled Fan</u>
- Solar Tracker
- Heartrate Monitor
- Plant Watering System

### Intermediate/Advanced Projects

- Sound Reactive Bluetooth Speaker
- Programmable Macro Pad
- Guitar Pedal
- DIY Airtag/GPS Tracker
- Smart Mirror
- Live Weather Station
- ESP32 Text to Speech Webserver
- Productivity Logger
- Smartwatch



## Signup Form









## Additional Information

- Projects can continue into spring semester especially advanced ones.
- Project teams can meet outside of scheduled meeting times.
- You can go over budget but it will be out of pocket.
- Highly recommended to be in a group.
- No limit to group size only limit is budget.





## Next Week's Session:

- Finalizing teams
- Brainstorming project ideas
- Microcontroller workshop

Next session will be on Monday, September 23

