



FA2024 Week 00 • 2024-08-29

# Introduction

SIGPwny Admin Team

# Overview

- What is SIGPwny?
- How to join SIGPwny?
- Who is SIGPwny?
- Women in CyberSecurity @ Illinois
- Ground Rules
- What does SIGPwny do?



# What is SIGPwny?

Why were we yelling at you at Quad Day?



**SIG • Pwn • y**



**Special  
Interest  
Group**



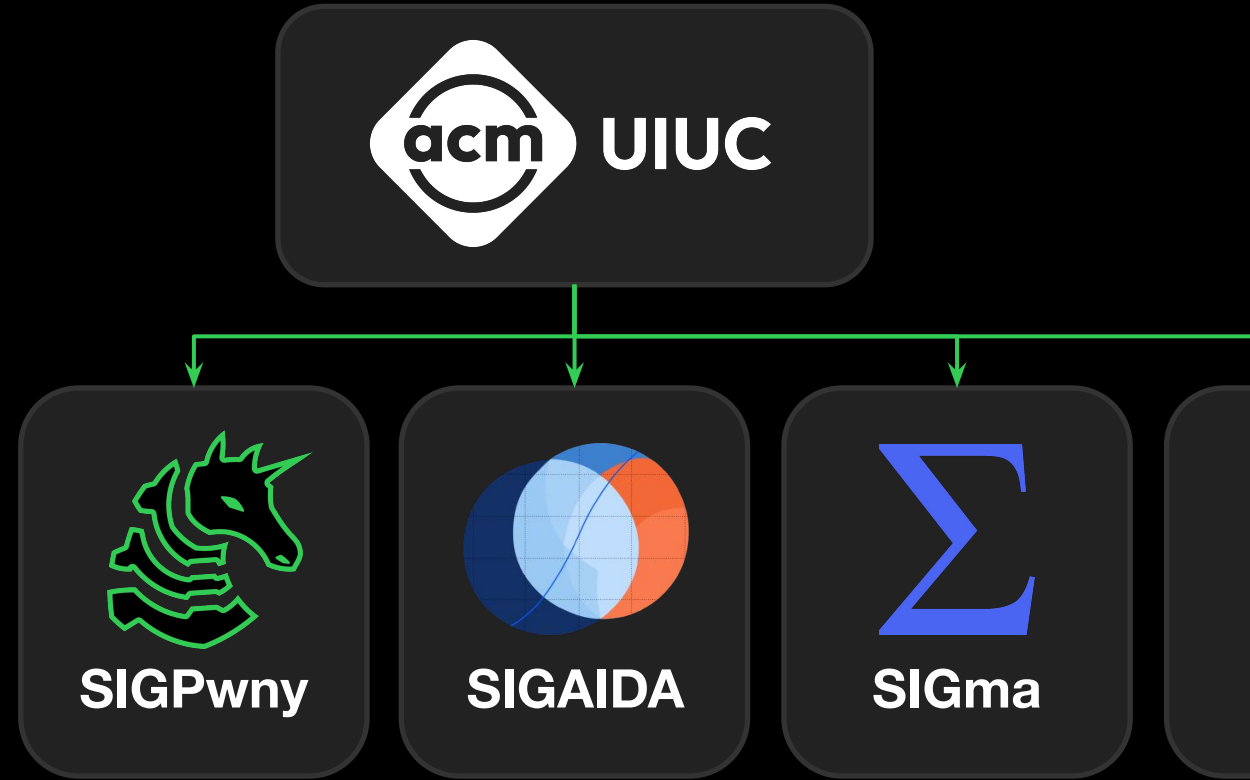
**Hack  
or "own"  
(slang)**



**For  
cool  
logo**

# About Us

- Computer security/hacking club at UIUC
- SIGPwny is under the Association of Computing Machinery chapter at UIUC
- Largest Special Interest Group within ACM@UIUC



SIGPwny is just one of many SIGs...  
but it's the best one



# How do I join SIGPwny?

You already have!

[sigpwny.com/discord](https://sigpwny.com/discord) to join our Discord server

[sigpwny.com/auth](https://sigpwny.com/auth) to receive the **@UIUC** role



**Who is SIGPwny?**



# Admin Team



**Minh Duong**

@WhiteHoodHacker  
Security Research @ MSFT



**Pete Stenger**

@spicypete  
VR/RE Intern @ Battelle



**Anusha Ghosh**

@0xk411  
AI Hacking @ NVIDIA



**Akhil Bharanidhar**

@akditch  
SWE Intern @ Pinterest



**Emma Hartman**

@lukewarmdaisies  
SecEng Intern @ Microsoft



**George Huebner**

@shorden  
Research @ UIUC



**Jake Mayer**

@henopied  
STEP Intern @ Google



**Julius White V**

@jcw515awsm  
SWE Intern @ Meta



**Richard Liu**

@rliu  
VR/RE Intern @ Battelle



**Ronan Boyarski**

@ronanboyarski



**Sam Ruggerio**

@surgdev  
VR/RE Intern @ Battelle





# Helper Team



**Henry Qiu**  
@CBCicada



**Juniper Peng**  
@32121  
DV Intern @ Synaptics



**Adarsh Krishnan**  
@rbowdarsh



**Kyler Norr**  
@kylernorr8



**Louis Asanaka**  
@louis\_2  
SWE Intern @ Fetch



**Cameron Asher**  
@bigkirbs



**Emma Shu**  
@buttermilkb  
SWE Intern @ NVIDIA



**Sagnik Chakraborty**  
@quaternion\_  
Arch/DevOps @ Cognizant



**Nikhil Date**  
@tensor1190



# Women in CyberSecurity



Bring together those interested in cybersecurity

Share knowledge, experience, networking and mentoring



Host workshops, networking opportunities, and tech talks

Beginner-friendly web dev + security projects





**Connect with us!**



**Join our Discord**

**Get meeting updates**

**Sign up for emails**

**Board Applications!**



**Now, some ground rules.**



# Code of Conduct

1. Be respectful.
2. Be inclusive.
3. Nothing illegal.
4. Don't cheat.
5. No NSFW or suggestive content in Discord.
6. Don't spam in Discord.
7. Use common sense.

The full Code of Conduct is available at [sigpwny.com/rules](https://sigpwny.com/rules).

Report misconduct to [sigpwny.com/report](https://sigpwny.com/report).



# You Will:

- Learn how to think with an adversarial mindset
- Explore the subcategories of security
- Develop practical security skills
- Find a community of friends and colleagues



# You Will Not:

- Learn how to hack your friend's Instagram account!
- Become a 1337 hax0r (praise anonymous!!1!!)
- Break into computers without explicit permission
- Learn how to hack overnight



# The "Don't Get Arrested" Slide

## Computer Fraud and Abuse Act (CFAA)

- Attacking "protected" computers
- Anywhere between a fine and **TWENTY** years in jail
- If you don't have **EXPLICIT** permission, **DON'T DO IT**





# Survey!

Please fill out this survey so we can plan our semester for you!

[sigpwny.com/survey](https://sigpwny.com/survey)



**What does SIGPwny do?**



**Learn**

**Compete**

**Build**

**Learn**

**Meetings**

**Pwny CTF**

**Compete**

**CTF Team**

**Purple Team**

**Embedded Team**

**Build**

**UIUCTF**

**Fall CTF**

# Meetings

## Thursdays, 6-7 PM

Siebel CS 1404

- 15 minutes talking
- 45 minutes doing

## Sundays, 2-3 PM

Siebel CS 1404

- 1 hour of extended lecture

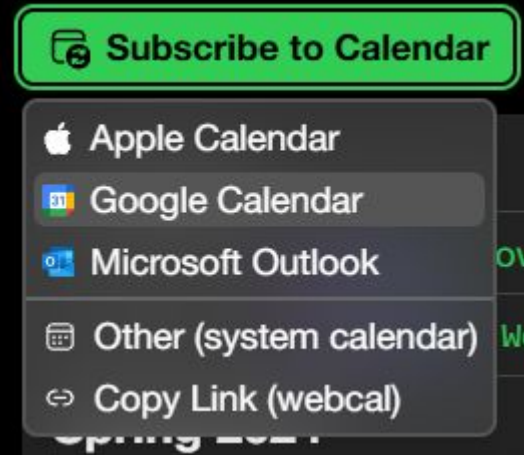
All our meetings are at:

<https://sigpwny.com/meetings/>



# Meetings

- Subscribe to our calendar!
- Add from [sigpwny.com/meetings](https://sigpwny.com/meetings) or directly using these links:
  - Apple Calendar: [sigpwny.com/applecal](https://sigpwny.com/applecal)
  - Google Calendar: [sigpwny.com/gcal](https://sigpwny.com/gcal)
  - Microsoft Outlook: [sigpwny.com/outlook](https://sigpwny.com/outlook)
  - Webcal: [sigpwny.com/cal](https://sigpwny.com/cal)



03:07

96

< Aug 29

Event Details

## Introduction

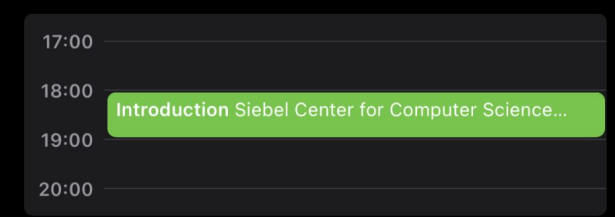
Siebel Center for Computer Science  
201 N Goodwin Ave, Urbana, IL 61801, United States

zoom Zoom

Join



Thursday, Aug 29, 2024  
from 18:00 to 19:00



Calendar

SIGPwny

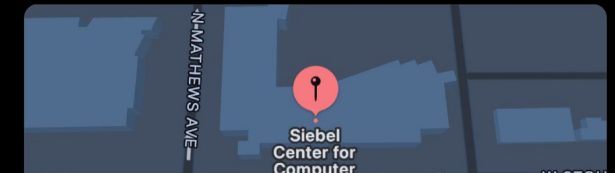
Alert

Time to Leave

Notes

<https://sigpwny.com/meetings/fa2024/2024-08-29/>

Location: Siebel CS 1404



Unsubscribe from This Calendar

# Teaching Philosophy

Cybersecurity is needed for every aspect of computer science!

Websites



Web Security

Messages



Cryptography

Video Games



Binary Exploitation,  
Reverse-Engineering



# Teaching Philosophy

SIGPwny's goal is NOT to make you a master in any field...

Web  
Hacking

Reverse  
Engineering

Binary  
Exploitation

Crypto  
graphy

Infra  
Security

Physical  
Security

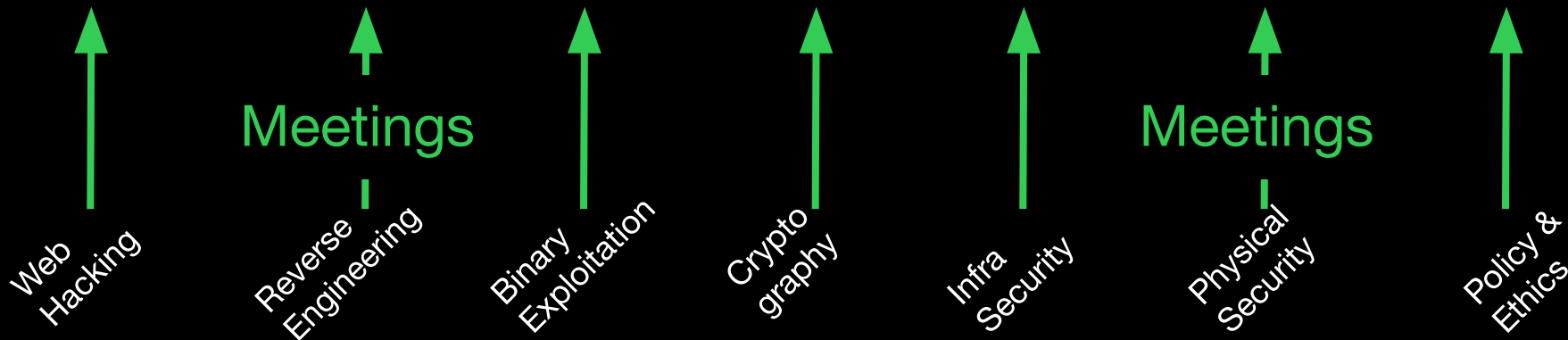
Policy &  
Ethics





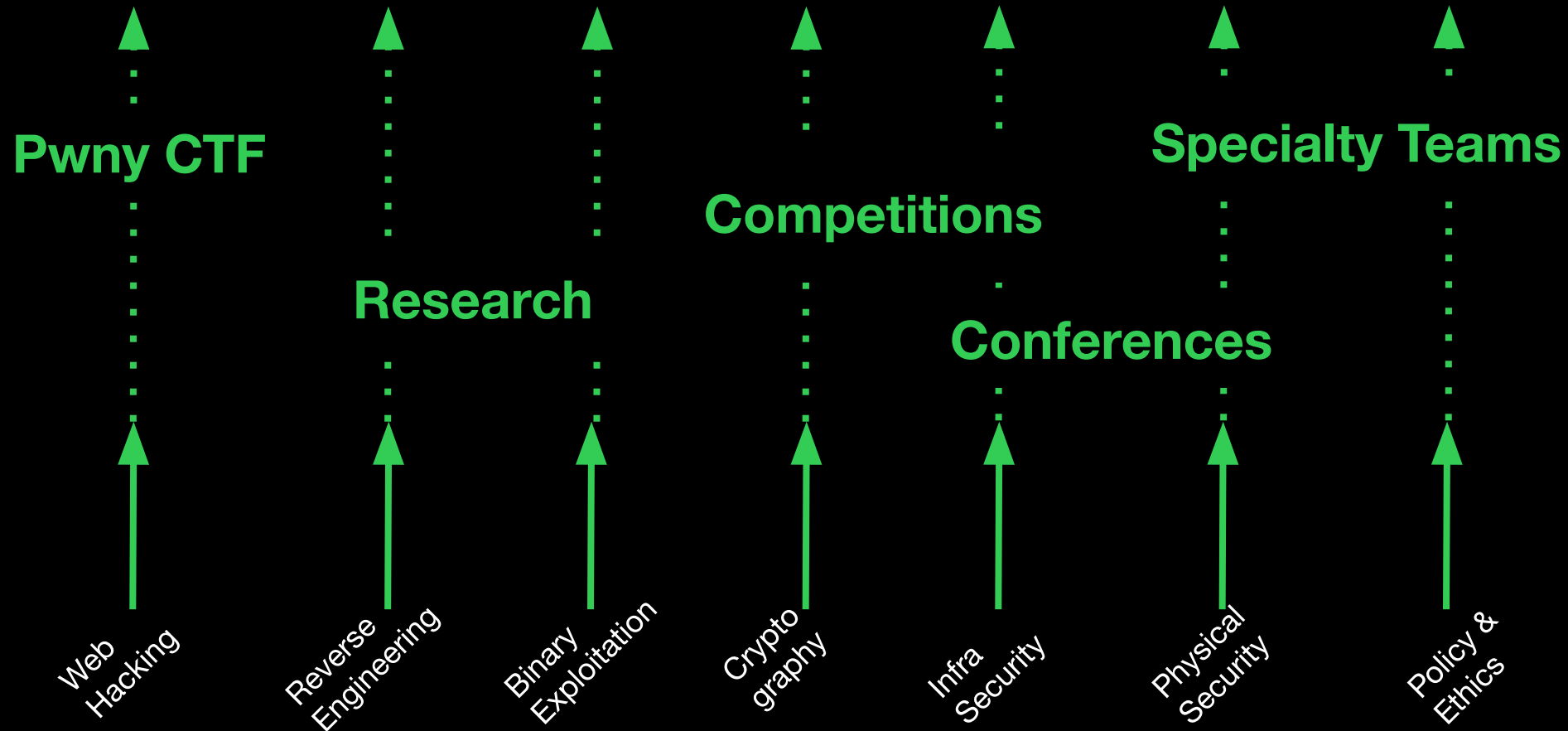
# Teaching Philosophy

... but it is our goal to teach you the basics of every field...



# Teaching Philosophy

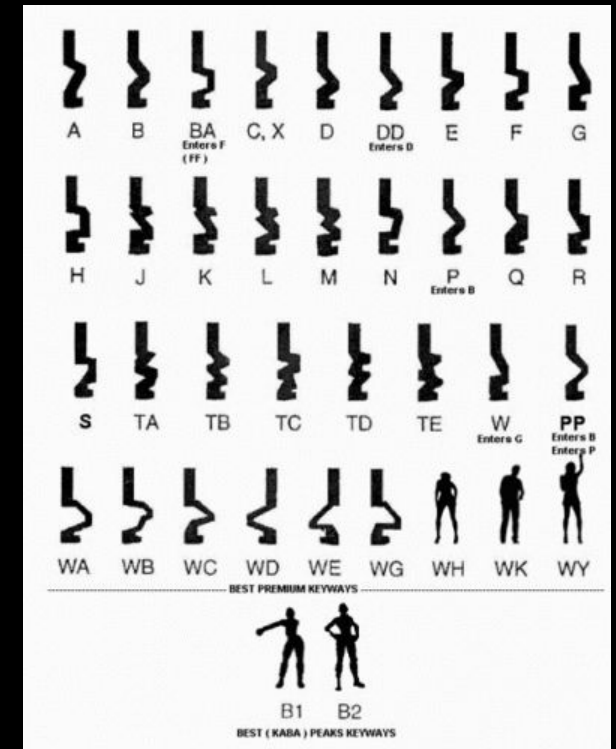
... and provide opportunities for **you** to master your interests!



# Lockpicking Socials

- Pick locks and hang out twice\*\* a month
- All levels of lockpicking experience welcome
- Beginner locks and picks provided, otherwise BYOL

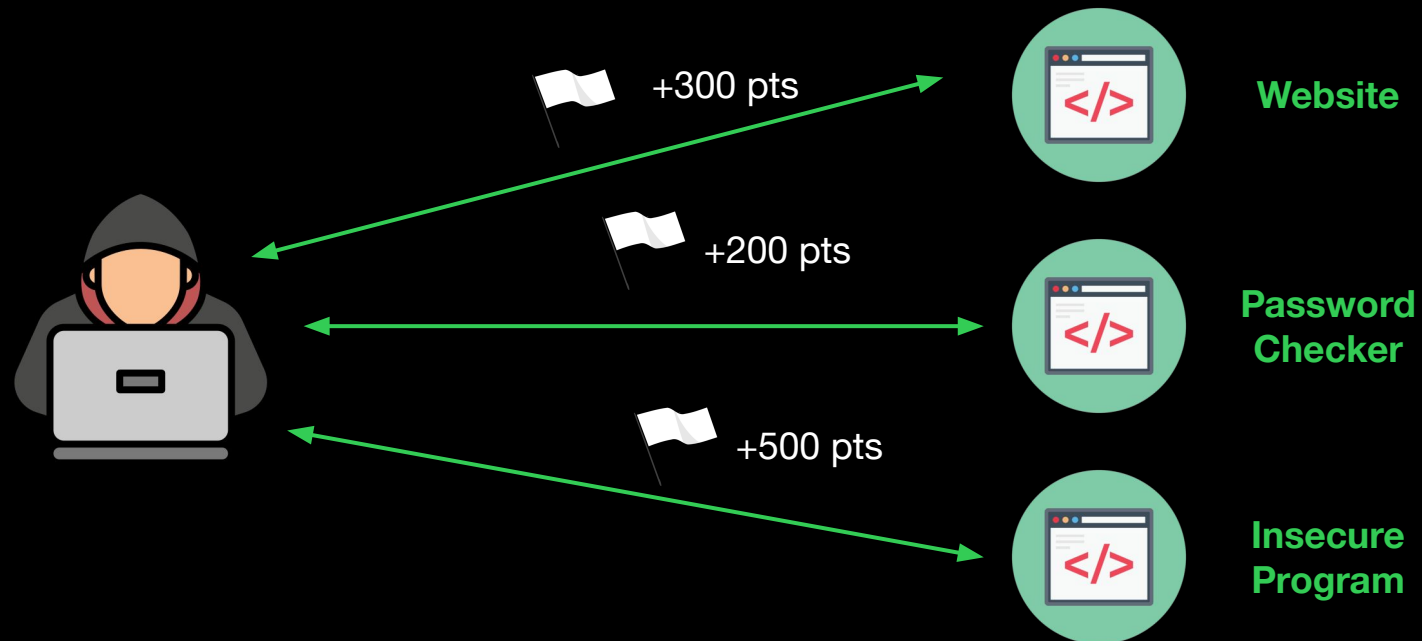
\*\*timing may vary



# What is Capture the Flag (CTF)?



- A CTF is a cybersecurity competition
- Compete against other teams
- "Jeopardy style" - hack the most (and hardest) things to win

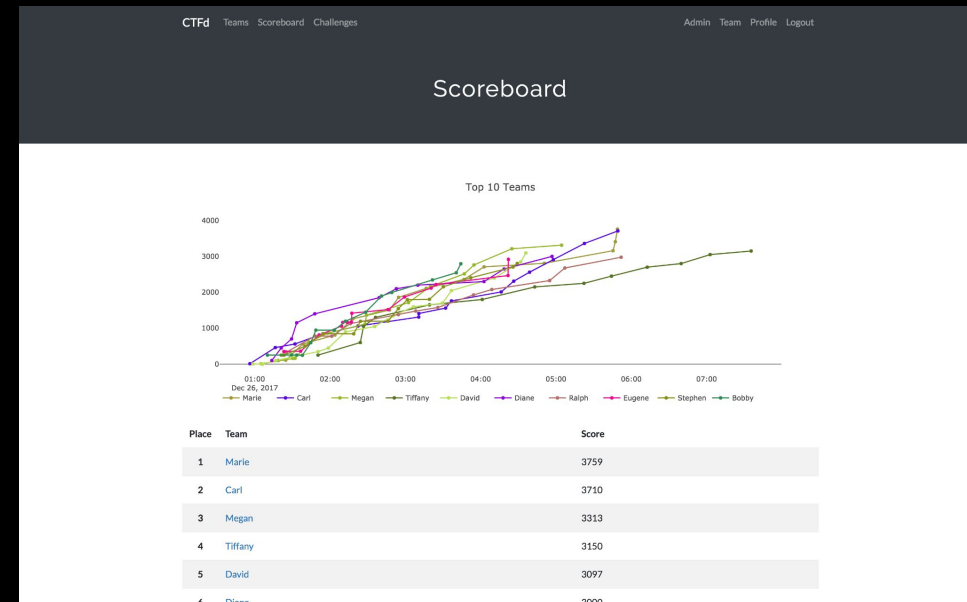


# Pwny CTF

- The best way to practice your security knowledge!
- Pwny CTF is our internal, 24/7/365 CTF with a leaderboard to compete with friends!

[ctf.sigpwny.com](http://ctf.sigpwny.com)

Sign up now!



**Learn**

**Meetings**

**Pwny CTF**

**Compete**

**CTF Team**

**Purple Team**

**Embedded Team**

**Build**

**UIUCTF**

**Fall CTF**

# CTF Team

- We participate in various CTFs hosted by other teams
- CTFtime is a global leaderboard that tracks team placement in CTFs and provides ratings



Overall rating place: **410** with **49.859** pts in 2018  
Country place: **48**

Overall rating place: **300** with **77.673** pts in 2019  
Country place: **31**

Overall rating place: **136** with **174.389** pts in 2020  
Country place: **19**

Overall rating place: **80** with **243.217** pts in 2021  
Country place: **12**

Overall rating place: **48** with **346.020** pts in 2022  
Country place: **6**

Overall rating place: **107** with **282.130** pts in 2023  
Country place: **11**

overall rating place: **1** with **9999** pts in **2024**  
country place: **1**



# CTF Team

- Everyone is welcome to join CTF team!
- Our normal Thursday/Sunday meetings prepare you for CTFs!
- Most CTFs are usually a weekend long - we will have a dedicated room for people to collaborate and solve challenges. Plus, free food :D

How to join CTF Team:

- Use the command `/ctfs optin` in our Discord. You need to have the `@UIUC` role first!





# Purple Team **NEW!**

- **Red teaming** - break systems
  - Find problems before threat actors find them
- **Blue teaming** - protect systems
  - Fix problems before threat actors take advantage of them
- **Purple teaming** is the intersection of these two fields!



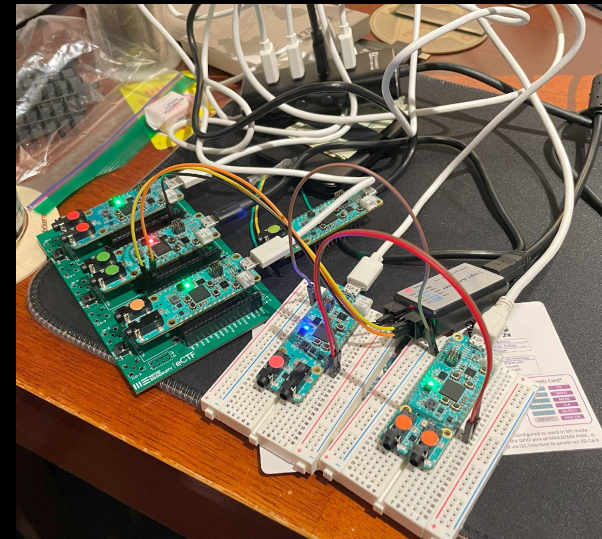
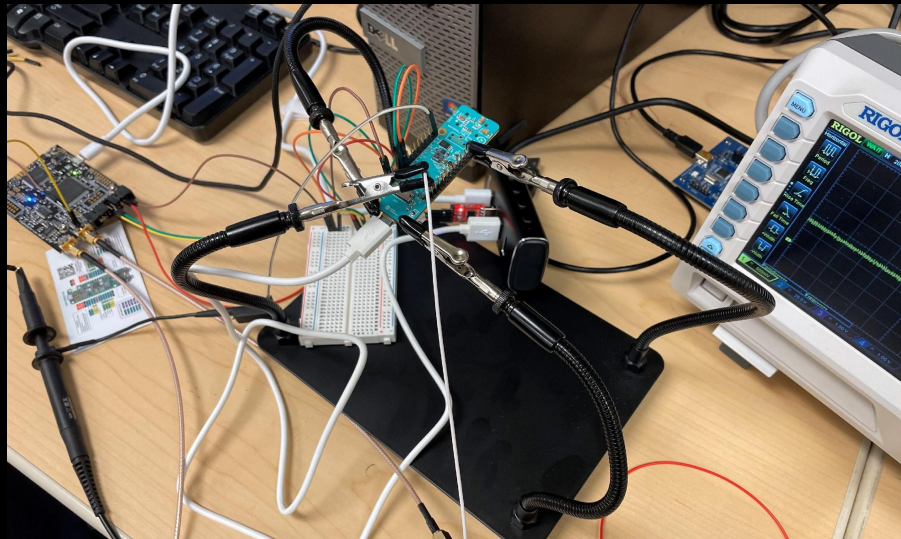
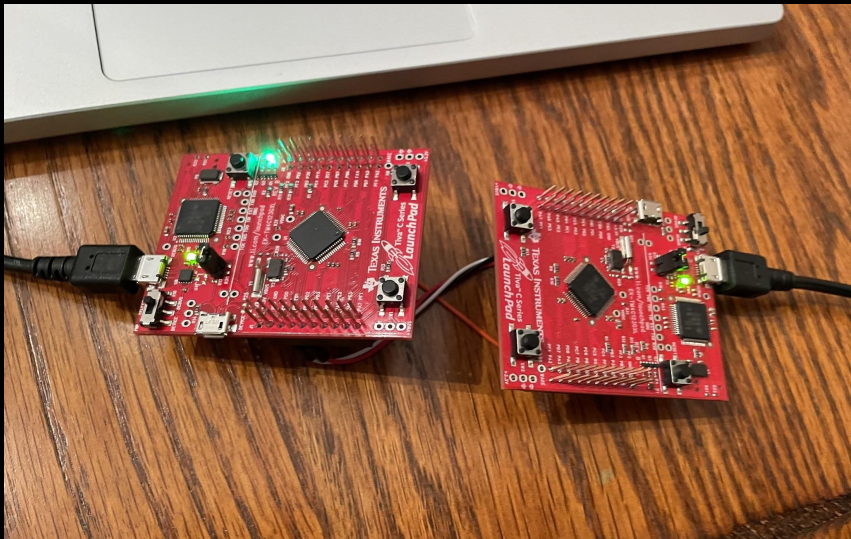
# Purple Team **NEW!**

- We will be running separate "bootcamp" meetings to train for the Collegiate Cyber Defense Competition (CCDC)
  - Tentatively: Tuesdays after 5 PM and Thursdays at 7 PM (after normal SIGPwny meeting)
- Advised by Prof. Casey O'Brien and John Bambenek
- If you have done CyberPatriot or similar competitions in high school, or have any experience with system hardening or securing services, reach out to us!
- [ronanpb2@illinois.edu](mailto:ronanpb2@illinois.edu)
- [mkhala6@illinois.edu](mailto:mkhala6@illinois.edu)



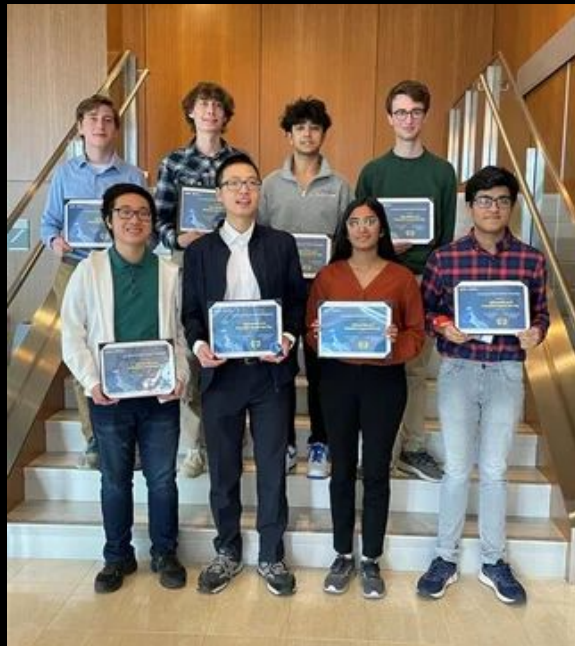
# Embedded Team

- We focus on attacks against embedded systems!
  - Microcontrollers, firmware bugs, side-channel analysis, fault injection!
- We work heavily with ARM assembly, C, and Rust (and will teach you!)



# Embedded Team

- Our main competition is eCTF in the spring semester
- Starting this fall semester, we will be holding weekly/bi-weekly lab activities to find and replicate bugs in assorted devices!



eCTF 2023 - 3rd Place



eCTF 2024 – 2nd Place



# UIUCTF (Spring/Summer 2025)

- Our global CTF event for the international security community!
- Design challenges for hundreds of people to solve
- Show off what you've learned and contribute to security education





**Learn**

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# Next Meetings

## 2024-09-01 • This Sunday

- Bowling Social!
- 6-8 PM @ Illini Union Rec Room

## 2024-09-05 • Next Thursday

- **No meeting!**
- ACM Open House

## 2024-09-08 • Next Sunday

- Setup Meeting + Intro to Terminal
- Bring your laptop!

Join our Google Calendar!

[sigpwny.com/gcal](https://sigpwny.com/gcal)



[sigpwny.com/discord](https://sigpwny.com/discord)



**Thank you! Any questions?**

**Meeting content can be found at  
[sigpwny.com/meetings](https://sigpwny.com/meetings).**

