



FA2023 Week 00 • 2023-08-27

Introduction

SIGPwny Admin Team

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What is SIGPwny?

Why were we yelling at you at Quad Day?



SIG • Pwn • y



**Special
Interest
Group**



**To hack
or "own"
(slang)**



**For
cool
logo**

About Us

- Computer security/hacking club at UIUC
- Largest Special Interest Group within ACM@UIUC



"Don't ever talk to me or my child again"



Who is SIGPwny?



Admin Team



Pete Stenger

@spicypete
SWE Intern @ NETSCOUT



Anusha Ghosh

@0xk411
AI Hacking @ Trail of Bits



Anakin Dey

@spamakin
???



Emma Hartman

@lukewarmdaisies
SecEng Intern @ Microsoft



George Huebner

@shorden
Sysadmin Intern @ Red Hat



Hassam Uddin

@Heasumn
SWE Intern @ IMC Trading



Julius White V

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SWE Intern @ State Farm



Minh Duong

@WhiteHoodHacker
VR/RE Intern @ Battelle



Richard Liu

@rliu
Cybersec Intern @ Sandia



Helper Team



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@kmh



Kyler Norr
@kylernorr8



Louis Asanaka
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SWE Intern @ Fetch



Nitya Sunkad
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SWE Intern @ AMD



**Pomona Carrington
-Hoekstra**
@theta5



Sagnik Chakraborty
@quaternion_
Arch/DevOps @ Cognizant



Sam Ruggerio
@surgdev
Research @ UIUC



Alumni

Name	Tag	Current Work and Cool Things
Ankur Sundara	@arxenix	Security @ Leviathan
Chris Kauchak	@2much4u	Vulnerability Research @ REDLattice
Faisal Khalid	@Chief	Cyber Risk @ Deloitte
Ian Klatzco	@ian5v	Security Consultant @ ???
Kuilin	@kuilin	PhD @ sslab (Georgia Tech)
Jesse Wang	@jjwang11	Trader @ IMC Trading
Joseph Ravichandran	@Ravi	PhD @ CSAIL (MIT) + DEF CON Speaker
Nathan Farlow	@0x1337cafe	SWE @ Jane Street
Thomas Quig	@sonicninja	Privacy @ Apple
YiFei Zhu	@zhuyifei1999	Linux Kernel Development @ Google
[REDACTED]	[REDACTED]	[REDACTED] @ NSA



Why join SIGPwny?



Why computer security?

- Massive growing industry
 - U.S. will have **750,000** unfilled cybersecurity jobs in 2025
 - Source: [AP News](#)
- Cybersecurity is relevant in all careers and computing
- **Red teaming** - break systems
 - Find problems before threat actors find them
- **Blue teaming** - protect systems
 - Fix problems before threat actors take advantage of them



How do I join SIGPwny?

You already have!

sigpwny.com/discord to join our Discord server

sigpwny.com/auth to receive the **@UIUC** role



Two Meetings/Week!

Thursdays at 7–8 PM

- Siebel CS 1404
- 15 minutes talking
- 45 minutes doing

Sundays at 2–3 PM

- Siebel CS 1404
- 1 hour of extended lecture



What we will and won't do



You Will:

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



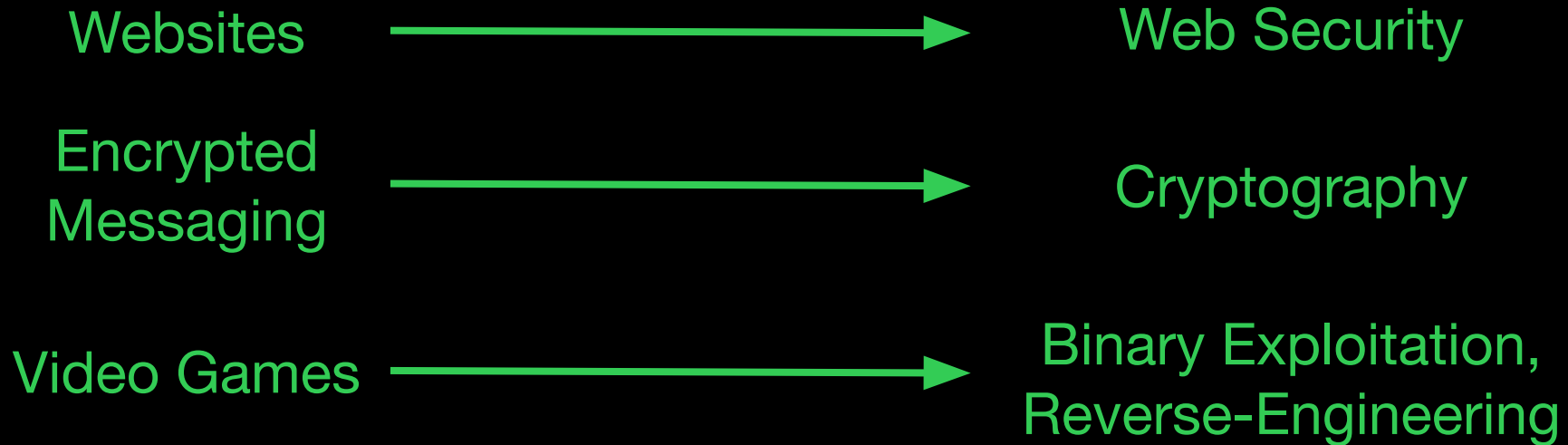
You Won't:

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



Teaching Philosophy

Cybersecurity is needed for every aspect of computer science!



Teaching Philosophy

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

Master

Beginner

Web
Hacking

Reverse
Engineering

Binary
Exploitation

Crypto
graphy

Infra
Security

Physical
Security

Policy &
Ethics



Teaching Philosophy

... but teach you the basics of every field...

Master

Beginner

Web
Hacking

Meetings
Reverse
Engineering

Binary
Exploitation

Crypto
graphy

Infra
Security

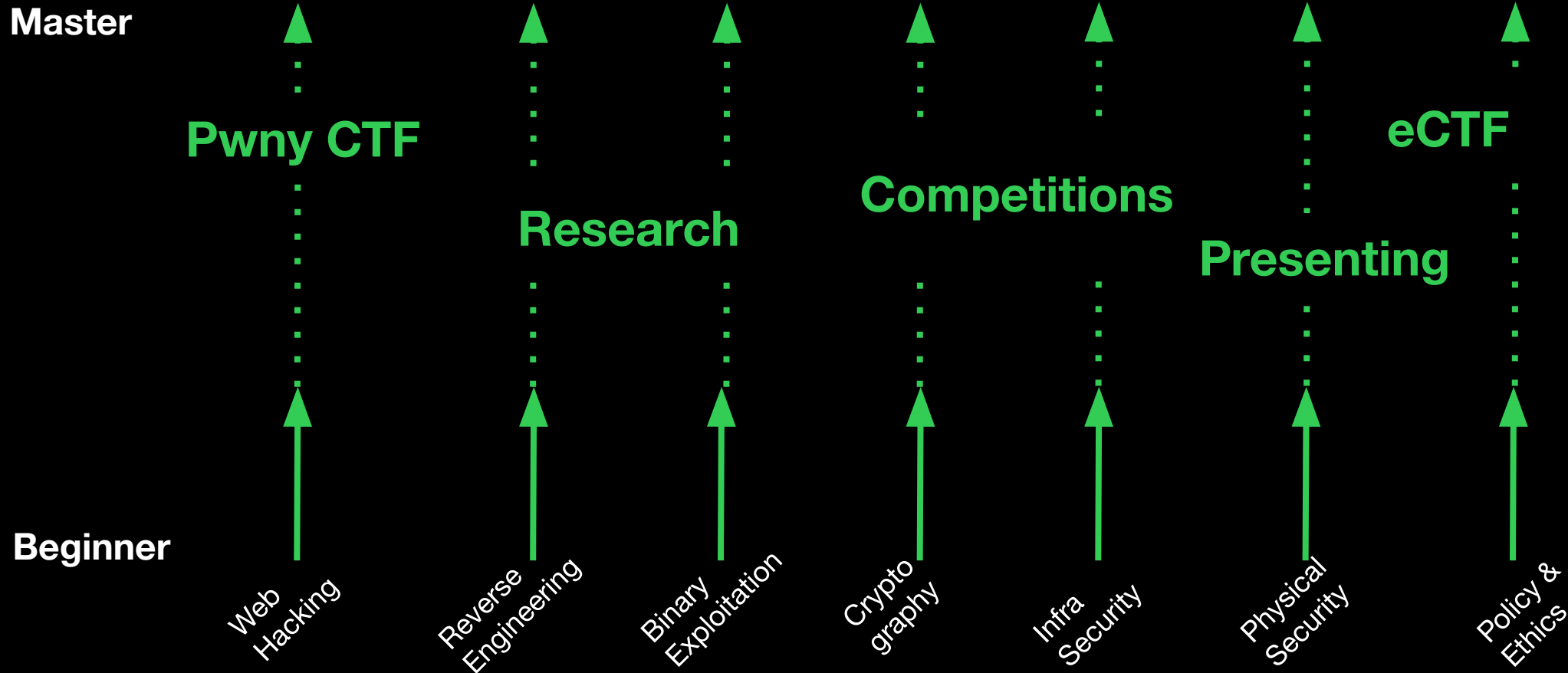
Meetings
Physical
Security

Policy &
Ethics



Teaching Philosophy

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



Code of Conduct



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.

Report misconduct to sigpwny.com/report.



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 to break into it, **DON'T**



Opportunities

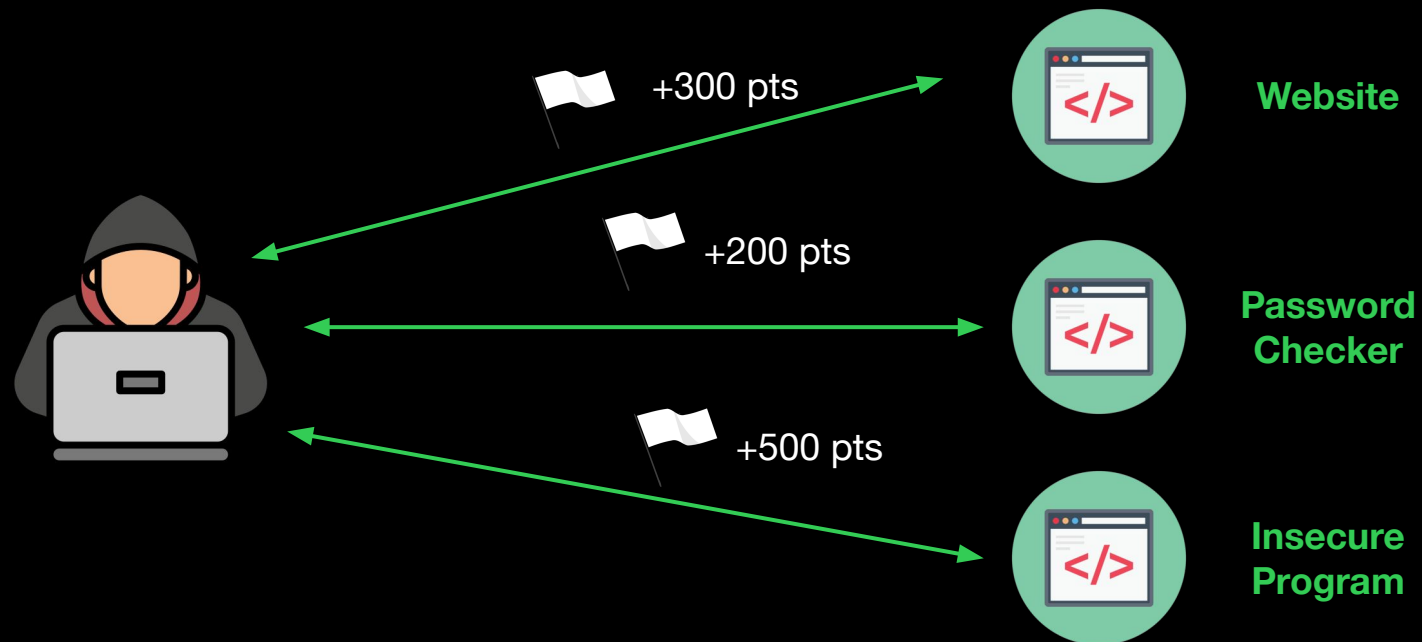
How to get involved with SIGPwny!



Capture the Flag (CTF)



- Cybersecurity competition
- Compete against other teams
- "Jeopardy style" - hack the most (and hardest) things to win

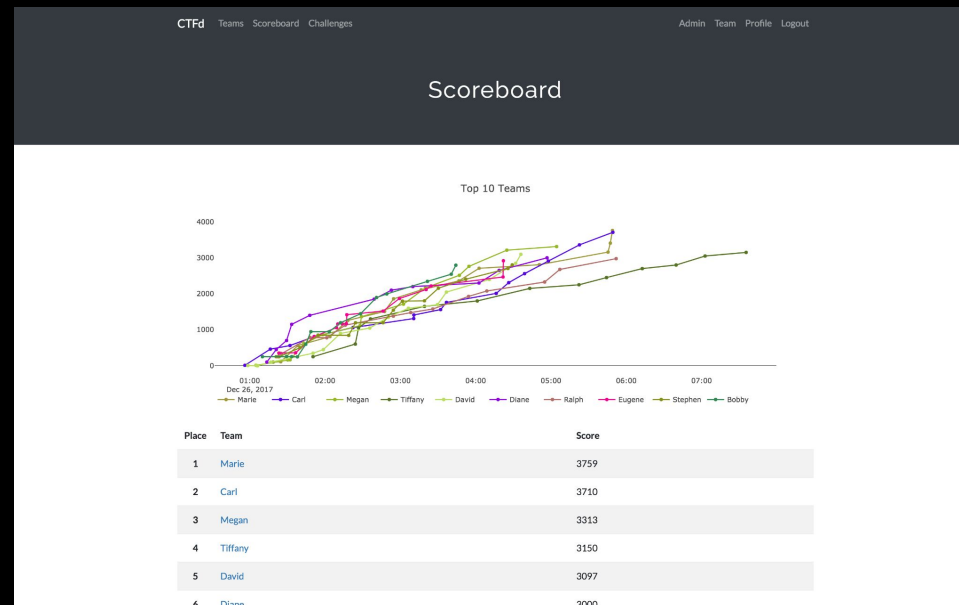


Capture the Flag (CTF)

- The best way to practice your security knowledge!
- We participate in various CTFs hosted by other teams
- Pwny CTF is our internal, 24/7/365 CTF with a leaderboard to compete with friends!

ctf.sigpwny.com

Sign up now!



Capture the Flag (CTF)

CTF TIME

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: **1** with **9999** pts in **2023**
country place: **1**

- **PatriotCTF 2023** - September 8th
First beginner CTF we will play!

- **Fall CTF 2023** - September 23rd
A beginner CTF that SIGPwny runs exclusively for UIUC students and people completely new to cybersecurity! Free food, shirt, PCB badge, and prizes!



Fuzzing Team

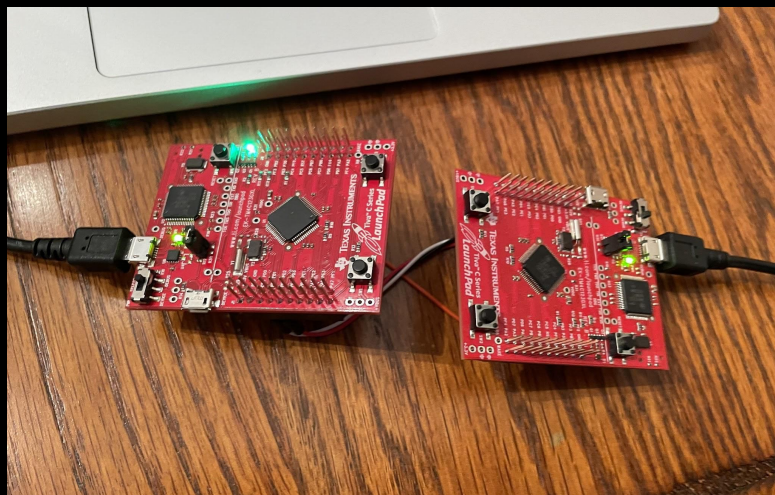
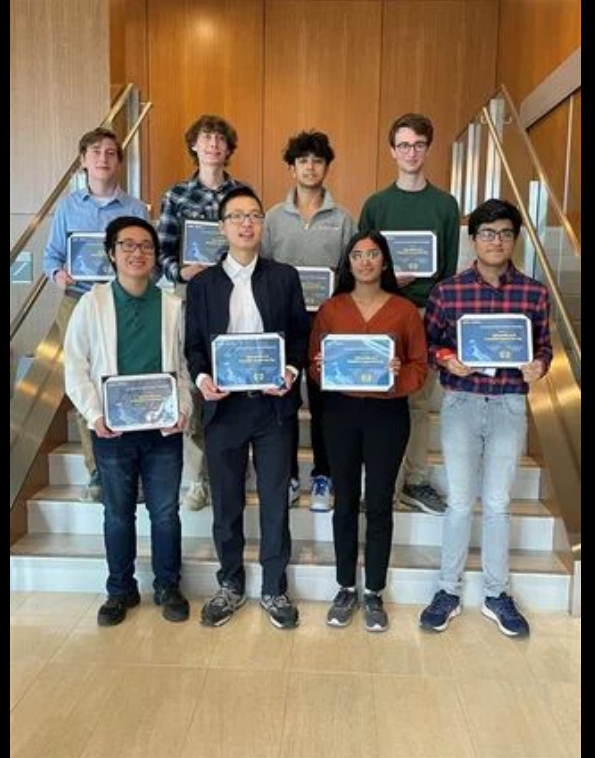
NEW!

- Find vulnerabilities in programs and get bug bounties (\$\$\$)
- Use fuzz testing to automate uncovering bugs
- Running over the course of the semester
- Systems programming experience required
- First meeting on **Saturday, September 2 at 11am** (room TBA)
 - Future meeting times will be flexible
- Message `@r1iu` on Discord if interested



eCTF (Spring 2024)

- Semester-long "Embedded CTF"
- Design and hack embedded systems
- Challenge changes every year
 - Last year, it was a car and key fob system
- Comes with 1 hour of credit!



UIUCTF (Spring/Summer 2024)

- Our global CTF event for the larger security field
- Design challenges for hundreds of people to solve
- Show off what you've learned and give back to the security education community



Next Meetings

2023-08-30 • This Wednesday

- Bowling Social Event
- 7–9 PM @ Illini Union Rec Room

2023-09-07 • Next Thursday

- Web Hacking I
- Bring your laptop!

Join our Google Calendar!

sigpwny.com/gcal



Thank you! Any questions?

**Meeting content can be found at
sigpwny.com/meetings.**

