Mason Competitive Cyber

Welcome to CC



About Our E-Board

- Michael Bailey
 - President
- Paul Benoit
 - Vice President
- Chuck Tran
 - Competitions Officer
- Brandon Wong
 - Secretary
- Andrew Chapin
 - Treasurer





Social Media



@masoncompcyber







Our Sponsors

- Battelle
 - Paid for shirts, helping pay competitions
 - Good employer, esp. for RE
 - Battelle Cyber Challenge
- The Crypsis Group
 - Paying for servers, probably competitions
 - Good employer, esp. for DFIR

Reminder: Handshake exists



Requirements to join MasonCC

- You are a current or past GMU student
- ANY MAJOR
- Don't have a skill base in cyber security?
 - We have links to help you build one go.gmu.edu/ccbeginners
 - Some of our talks are more basic than others



Running for positions



BRANDON IS DEAD TO US



Key Links



Website competitivecyber.club

Training Content go.gmu.edu/cctraining go.gmu.edu/ccbeginners tctf.competitivecyber.club

Recordings videos.competitivecyber.club

Flash Poll



go.gmu.edu/poll



nothing to see here



[Direct poll Link]

What's a CTF?

The ones we do are largely jeopardy:

Jeopardy-style CTFs has a couple of questions (tasks) in range of categories. For example, Web, Forensic, Crypto, Binary or something else. Team[s] can gain points for every solved task. More points for more complicated tasks usually. Sometimes, the next task in line can be opened only after some team solve previous task. Then the game time is over sum of points shows you a CTF winner. Famous example of such CTF is Defcon CTF quals.

- CTFtime, heavily edited



How does MasonCC do competitions?

- Online CTFs
 - Slack
 - channels for each comp
 - #ctf-watch
 - competitivecyber.club
 - Usually over a weekend. Fri-Sun
 - Spend 15min or spend hours
- In-Person Competitions
 - Carpool
 - Occasionally overnight at hotels
 - Slack when we're competing



Call for Competitors

National Cyber League Spring



CCDC





CC Previously...

- **1st Place** VT Summit, Cyber Fusion, AWS Security Coding Challenge, Both Capital One and Booz Allen CTF wargames
- **2nd Place** in RIT RC3 CTF, 3rd in Cyberdawg CTF and Booz Allen CTF
- Hiring from: Crypsis Group, Battelle, Kyrus Tech, Leidos, PFP Cybersecurity, Booz Allen Hamilton, etc
- Recognition from @MarkWarner,
 @GeorgeMasonU, and VSE News twice



Tracks System

- Green and Gold tracks
 - Neither are "advanced" or "basic" by design
- Corporate guests = Single track
 - We don't want to see someone who funds us have to fight a student for attendance
- Available on: https://competitivecyber.club/meeting/
- Announced in Slack and via Email List



Upcoming Talks (Tentative)

Talk	Speaker
Intro	Paul & Mike
Linux For Security Work (Setup and Customization)	Mike
Linux Privilege Escalation	Paul
Angr: A Binary Analysis Framework	Caffix
Windows Privilege Escalation	Paul
(Topic TBD)	Tyler
Buffer Overflows	Paul
Active Offense: Nmap Metasploit etc	Mike
Fun Raspberry Pi Projects	Paul
XSS	1pwnch
Hardware Hacking	Chuck
Web App Sec	Mike



Upcoming Talks (Tentative)

Talk	Speaker
Quantum Crypto	Cothan
Exploitation in AWS	Mike
From XML to IoCs: Rapid DFIR	Mike
Career Rountables: Talking Jobs with Members	ppl with jobs
Windows Privilege Escalation	Paul



Past Talks

Hackazon and more

Club Intro/Training CTF Challenges

Forensics, Complete with Weird CSAW Problems

Web Exploitation

backdoorCTF practice arena

Linux, Scripting, and Regex

Sam (of Kudu Dynamics) on CSAW CTF 2017 problems

Cryptography (not simple ciphers)

Python and Ruby CTF scripting, Regex

Amazon Web Services EC2

Rob Shein of PwC on Car Hacking

Hardware Hacking with Chuck

Web Exploitation 2
Basic Linux with Mike

Shellcode with Chris (caffix)

Forensics

Docker: Virtualization for Poor People

Networking

Format String with Chris (caffix)

GRIMM Challenge

HackTheBox.eu (GET AN INVITE)

Steganography

DEP and ASLR Bypass with Chris (caffix)

Intro. Reverse Engineering

GRIMM Meeting

1pwnch - Dirty Magic of Webshell

Android APK (App) Reversing with Tyler

Antivirus Evasion

Attack/Defense with Hands-On

Best Of Defcon Screening & Bring Food/Snacks

CC Intro + Scanning & Attacking Hosts (metasploit/nmap)

Profiling & Dissecting a Web App: Recon to

Scanning

Corey Sheldon of Fedora, Ameridea on System

Hardening

Cyber Fusion 2017 Simulation: Problem Sets and

Walkthroughs from the Real Event

Host Based Forensics

Kirstie Failey (The Crypsis Group): The Incident

Response Process

Love our Logs: Using Splunk to Identify Threats

and Pattern

Paul - CTF Tools CC Uses

Physical Security, Lockpicking, & RFID

Power Grid Security with PwC

Profiling & Dissecting a Web App: Pwning and

Footholds

William Burke IV DHS Red Teaming Talk

... And more



New This Year

- Hosting a CTF in November
 - Full on situation
- Open to paid competitions
 - CCDC and NCL
- More social events
 - Informal stuff #friends
 - Study ones
 - People competing ones
- More spending
 - Different spending patterns
 - "Las Vegas" is a line item this year
 - Zero percent chance it happens, but a fun example!



Sponsors

- We have them
- Heavily vetted (people generally work there)
- Interest comes first, then we ask them for money
- Apply for them
 - They're here because they want members



Proud Sponsors



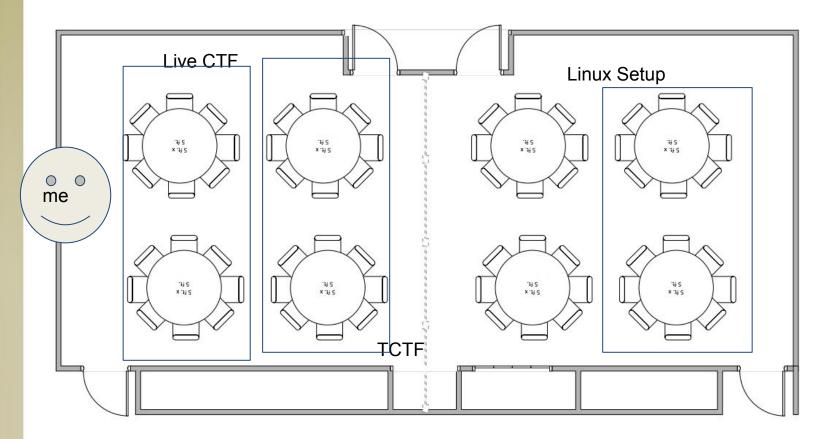
Thank you to these organizations who give us their support **They're hiring and have hired us before**



It can be done™



What we're doing now...





Imagine there are tables...

COMMENCE



