### Beat to 1337

Creating A Successful University Cyber Defense Organization

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(Note: slide text will be mostly replaced by images during the presentation, this deck is designed as a handout)

## This presentation...

Will show you a five step program to:

- 1. Plan! make a goal for yourself and your university
- 2. Recruit! reach out to the campus, find interested parties
- 3. Organize! gather resources, don't sulk over no budget
- 4. Learn! understand everyone's skills, abilities, and interests
- 5. Play! compete, join a competition, start evaluating your skills

...And we'll give out prizes!
So try to be involved!

#### Problem

- Everyone wants to be a hacker but you're not going to learn how to hack in "Theoretical Computer Science 101"
- Even in information assurance classes, often times the subject matter is so high-level that you can't really get anything (practical) out of it...
- You may not have enough information security knowledge to walk up and be a pen-tester or researcher
- You may not know enough people to make a team

#### Our solution!

- We compiled data about past competitions for you to use, learn from, and ramp up your team to compete this coming year!
- We compiled a detailed guide from what we've learned and professionals we've sought advice from!
- We modified a collaboration software solution to help students play, organize and participate in CTFs!
  - We recommend a hardware solution to complement
  - Plan to distribute the software as an ISO image

#### What's in the Data?

- What we did and what works
  - Don't reinvent the wheel... we did it for you
- How to stop complaining about the things that are holding you back and start owning some n00bs!
- Tips on how to organize, educate and motivate a team of lazy college kids
- A calendar of national and international CTF-style competitions that you and your team can compete in!

#### What's in the Guide?

- Chapters and lesson plans on a wide range of information security topics including:
  - web application security
  - source code auditing
  - o reverse engineering
  - exploitation
  - cryptology
  - o and more!
- A list of web tutorials videos that teach everything from basic information security knowledge to super 1337 hax0r skillz

#### What's in the Software?

- A customized version of a web-based collaborative real-time document editor (similar to google docs) that will allow you to collaborate with your team while it mines your progress and results
- Report generating scripts that convert your mined data into fancy documents that outline your abilities and where you can improve
- An organized repository of tools, software and scripts to ensure the most efficient use of your time
- And a ton more that won't fit on this slide!

# Our Experience, is this effective?



## Your Input!

- Now we need your input and your help!
- Our goal is to integrate these games into all university programs, with great emphasis
- We need a method and metrics to prove that competition and games aid in comprehension and motivation

Tell us how to do this, ...and win some prizes!