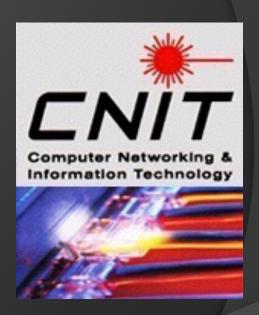
# Security Training at CCSF





# A.A. Degree

Courses Required for the Major in Computer Networking and Information Technology			
Core Courses	Units		
CNIT 103 Computer Hardware	3		
CNIT 106 Introduction to Networks			
or CNIT 201E Networking Fundament	als 3		
CNIT 131 Internet Basics and Beginning	HTML 3		
CNIT 120 Network Security	3		

Option in Network Security
Required
CNIT 121 Computer Forensics3
CNIT 122 Firewalls
CNIT 123 Ethical Hacking & Network Defense 3
Total Units

#### Certificate of Accomplishment in Cybersecurity

Required Courses	Requi	ired	Cou	rses
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Course	Units
CNIT 40 DNS Security	1
CNIT 106 Introduction to Networks	
or CNIT 201E Network Fundamentals.	
CNIT 120 Network Security	3
CNIT 121 Computer Forensics	3
CNIT 122 Firewalls	3
CNIT 123 Ethical Hacking	3

#### Certificate of Achievement in Advanced Cybersecurity

Required	l Courses
----------	-----------

Course	Units
CNIT 106 Introduction to Networks	
or CNIT 201E Network Fundamentals.	
CNIT 120 Network Security	3
CNIT 121 Computer Forensics	
CNIT 124 Advanced Ethical Hacking	
CNIT 125 Information Security Prof Practices	
CNIT 126 Practical Malware Analysis	
Total	10

## **CNIT 120: Network Security**

Fundamentals of Network Security
Preparation for Security+ Certification
Essential for any Information
Technology professional

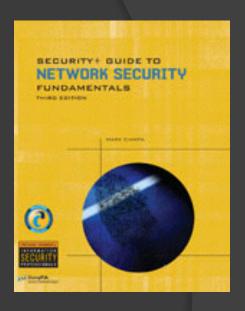
Download Security+ Objectives

Certification and Your Business

CompTIA Security+ History

Prepare for Exam

> Exam Policies



then adding progressive layers of expertise seems to us to be absolutely the right

thing to do, from both the customer and employee standpoints."

Steve Jordan, Vice President

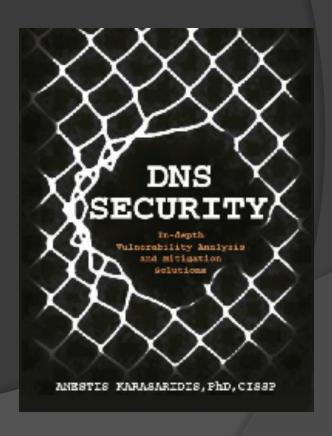
System Engineering & Consulting, McAfee, Inc.



# **CNIT 40: DNS Security**

Configure and defend DNS infrastructure





### **CNIT 121: Computer Forensics**

- Analyze computers for evidence of crimes
- Recover lost data









## **CNIT 122: Firewalls**

• Defend networks

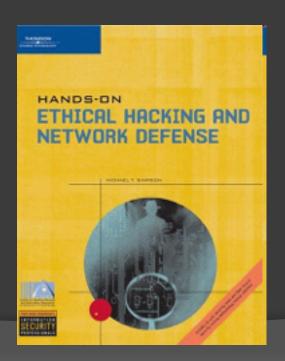


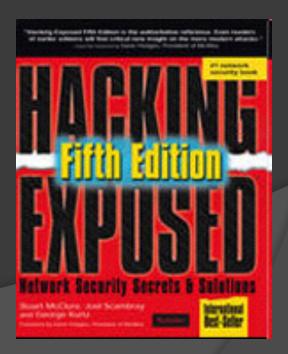
# Two Hacking Classes

Perform real cyberattacks and block them

**CNIT 123: Ethical Hacking and Network Defense** 

**CNIT 124: Advanced Ethical Hacking** 





# Supplemental Materials

Projects from recent research Students get extra credit by attending conferences



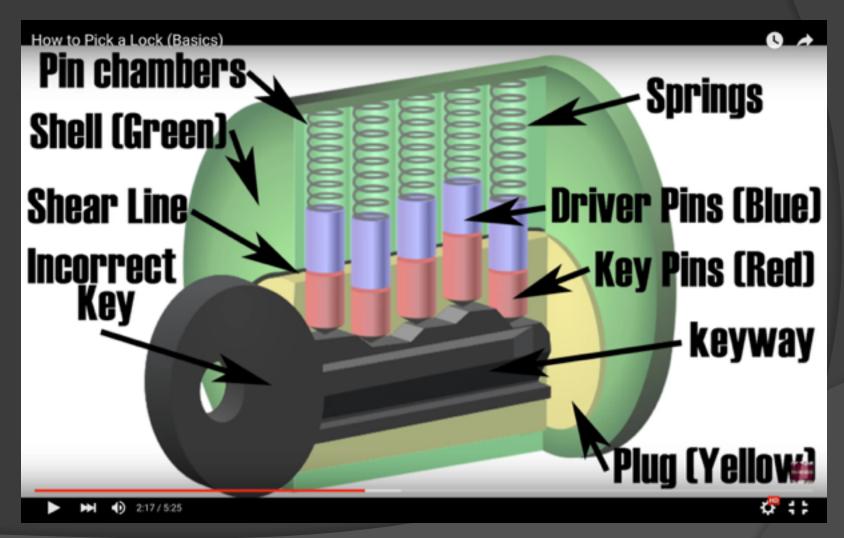


### **Certified Ethical Hacker**

CNIT 123 and 124 help prepare students for CEH
 Certification



## Lockpicking



# CNIT 125: Information Security Professional

 CISSP – the most respected certificate in information security



#### The Certification That Inspires Utmost Confidence

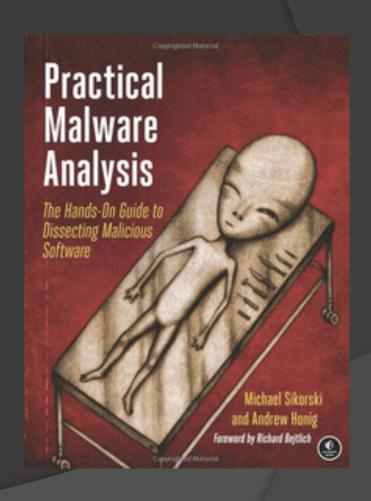
If you plan to build a career in information security – one of today's most visible professions – and if you have at least five full years of experience in information security, then the CISSP® credential should be your next career goal. It's the credential for professionals who develop policies and procedures in information security.

The CISSP was the first credential in the field of information security, accredited by the ANSI (American National Standards Institute) to ISO (International Organization for Standardization) Standard 17024:2003. CISSP certification is not only an objective measure of excellence, but a globally recognized standard of achievement.

# **CNIT 126: Practical Malware Analysis**

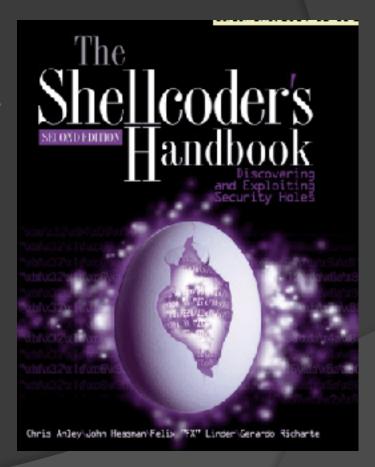
Incident response after intrusion





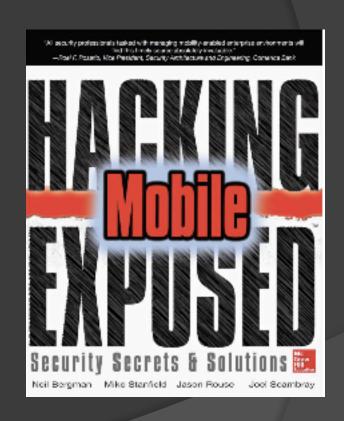
### **CNIT** 127: Exploit Development

- Turning crashes into remote code execution
- Buffer overflows
- Return-to-libc
- Return Oriented Programming



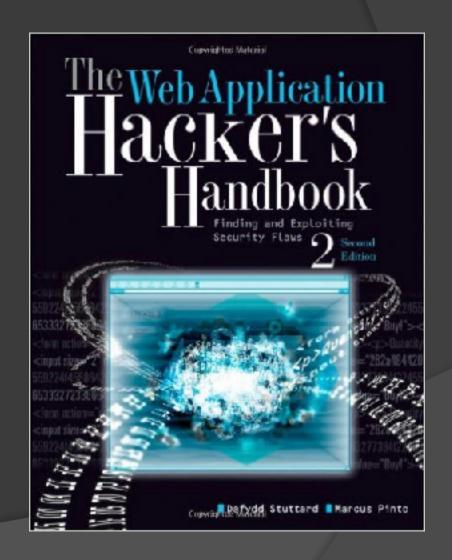
### **CNIT 128: Hacking Mobile Devices**

- Rooting and jailbreaking
- Android security model
- Locking, remote location, and remote wipe
- Mobile payment, including Google Wallet



# CNIT 129S: Securing Web Applications New in Fall 2016

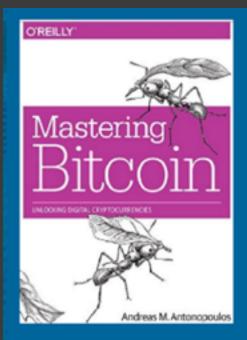
 Techniques to breach the security of Web applications, and to protect them



# CNIT 140: IT Security Practices Preparing for Cybercompetitions

- Join CCSF\_HACKERS
- Compete for national prizes & glory



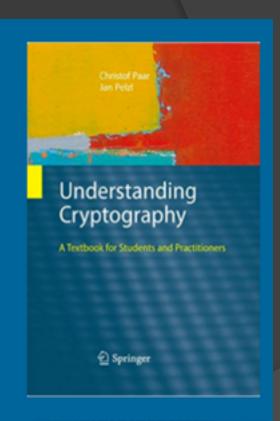


CNIT 141: Cryptography for Computer Networks

Planned for Fall 2017

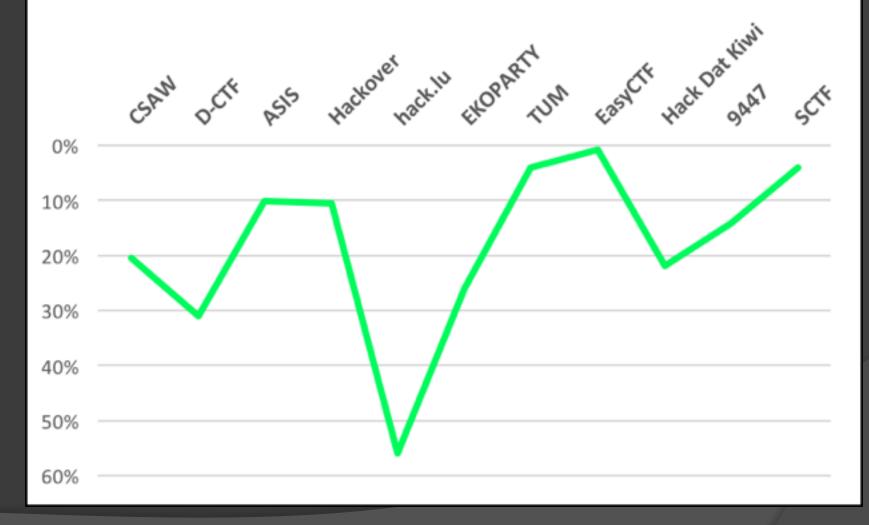
 $\frac{Schedule \cdot Lecture \ Notes \cdot Projects \cdot Links \cdot Home}{Page}$ 

Optional book (\$33) Free online version



# CYBER COMPETITIONS

# CCSF\_HACKERS Fall 2015 Rankings



# Welcome to RIT



Collegiate Penetration Testing Competition









University at Buffalo The State University of New York









NEW HAVE



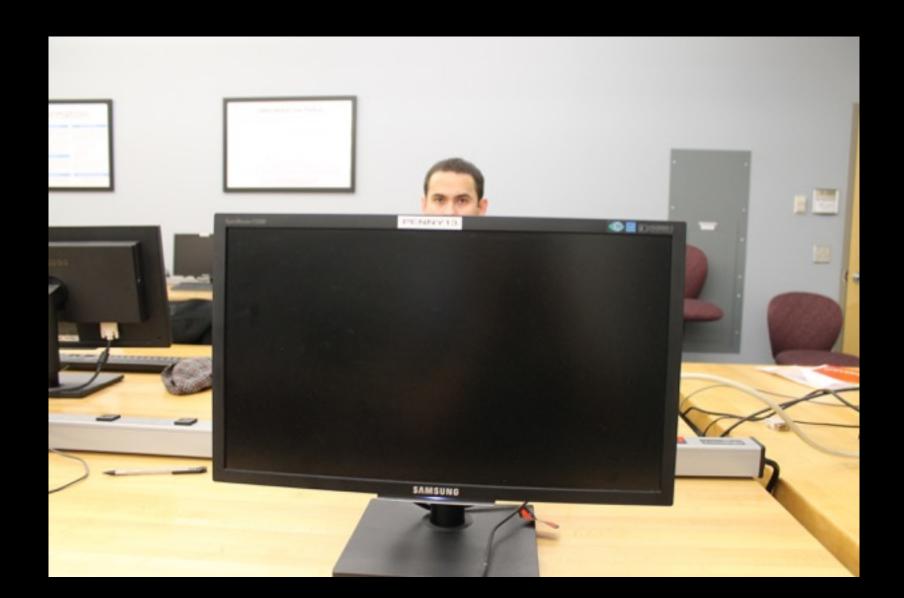
















- Collegiate Cyber Defense Competition
  - Most relevant to real-world jobs

### CONVENTIONS AND MEET-UPS



- First Tues. every month
- Downtown San Francisco
- Free Pizza
- Industry expert presentations



- Sat Oct 11 & Sun Oct 12, 2014
- Foothill College
- Developers, not focused on security



### RS∧Conference 2017

Moscone Center | San Francisco

February 13 - 17, 2017







# Guest Speakers













# Hacking Sam











#### Responsible Disclosure Policy for Samsclass.info

We take the security of our systems seriously, and we value the security community. The responsible disclosure of security vulnerabilities helps us ensure the security and privacy of our users.

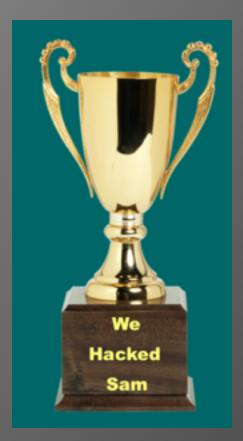
#### Guidelines

We require that all researchers:

- Make every effort to avoid privacy violations, degradation of user experience, disruption to production systems, and destruction of data during security testing;
- Perform research only within the scope set out below;
- Use the identified communication channels to report vulnerability information to us; and
- Keep information about any vulnerabilities you've discovered confidential between yourself and Sam Bowne until we've had 15 days to resolve the issue.

If you follow these guidelines when reporting an issue to us, we commit to:

- Not pursue or support any legal action related to your research;
- Work with you to understand and resolve the issue quickly (including an initial confirmation of your report within 72 hours of submission);
- Recognize your contribution on our <u>Security Researcher Hall of Fame</u>, if you are the first to report the
  issue and we make a code or configuration change based on the issue.



server pwned by axi0mX :-P

tinyurl.com/samspw

