

# Hot topics, round 3

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~piquant~

# News flash

- RIP Pats
- U.S. consumer protection official puts Equifax probe on ice ([link](#))
- Market shits the bed
- “What are you working on this week?” ([link](#))
- “Landing the CS internship/Job with Saqi Mehta” ([link](#))
- HP comes out with color 3D printer ([link](#))

# Tufts\_Secur-ity



Ming Chow & Winnona DeSombre



# Winnona DeSombre

Tufts Class of 2018  
CS & IR

Security Experience:

- Developing prototypes for government contractors (MITRE, MIT Lincoln Labs)
- Researches and follows Chinese and North Korean hacking groups (Recorded Future)
- Didn't even know what CS was until taking COMP11 freshman year



# Ming Chow

Tufts Class of 2002/2004

Bachelors in CS/Math

Masters in CS

Security Experience:

- Literally everything under the sun
- Wall of Sheep Member, presents at multiple security conferences, including DEFCON
- l33t H@ck3r
- Lecturer at Tufts - teaches Web Development, Mobile Development, Security.

# Part 1

Overview of Cyber Security as a  
field and its interdisciplinary  
nature

# Part 2

The Hacker Community and its  
technical state

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**What is Cyber Security?**

Malware

Worms

Blackhat

DEFCON

North Korea - Sony

STUXNET - Iran

Hacker

Espionage

Crime

DDoS

Exploit

Phishing

Critical Infrastructure

Ransomware

WANNACRY

Doxxing/Blackmail

Software

VPN

Vulnerability

0 Day

Botnet

Capture-the-Flag

Offense - Defense

Threat Intelligence

Threat Hunting

Endpoint Protection

Malware Analysis

Reverse Engineering

Identity Management

Firewall

Antivirus

Encryption



## Ensuring that your organization is safe from threats:

(digital infrastructure <- physical and digital threats)

(physical infrastructure <- digital threats)

- Individual: protecting your identity and assets from criminals and surveillance
- Financial Industry: protecting the online transfers of money
- Government: protecting the country from espionage and destructive attacks

**What are Hackers?**



HACKING IN PROGRESS

Individuals who find creative ways to get into and around systems - they aren't necessarily bad people!

Motivations:

- Fun, exploration, discovering weaknesses that can assist others
- Fame, nationalism, profit

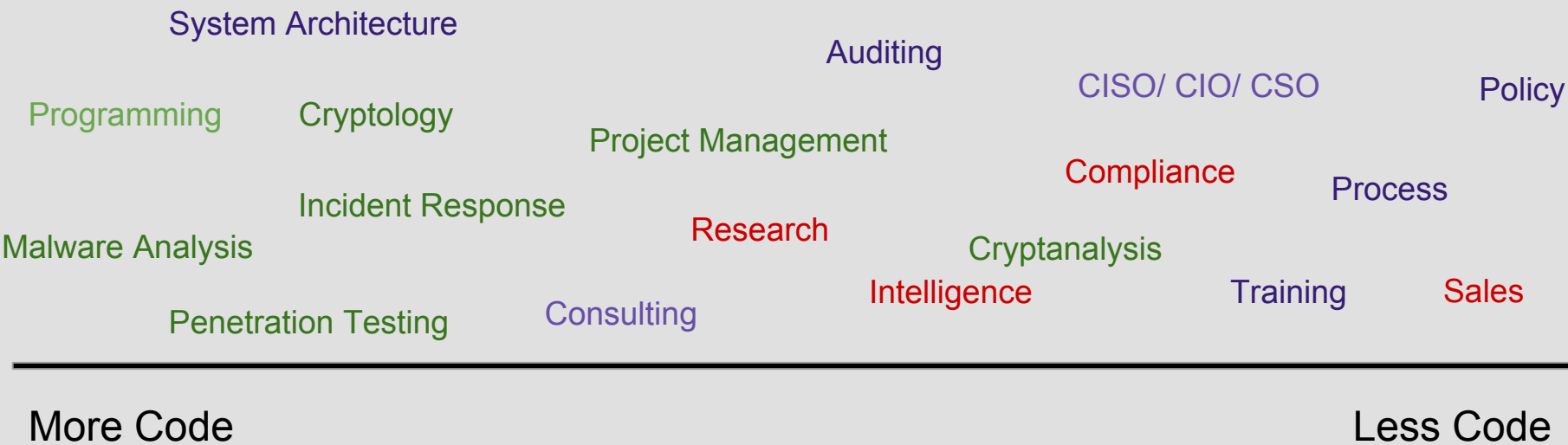
**What are some famous Hacks?**

- STUXNET
  - 5 0-days
- WannaCry
  - Ransomware & Worm
- Mirai Botnet
  - IoT & Minecraft
- Operation Aurora
  - Spearphishing
- Buckshot Yankee
  - USBs

# Cyber Security - a Spectrum

**Cyber Security is not just one set of jobs - it's a ton of different jobs!**





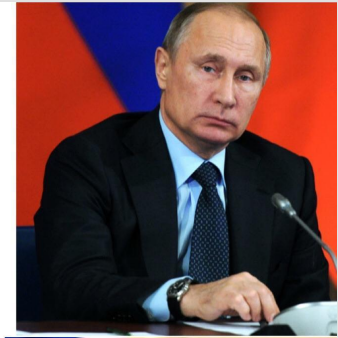
“You don’t need to know everything - you need to know enough to be dangerous”.

**Cyber Security touches every  
industry.**

# Offense vs. Defense, Building vs. Breaking

2 Examples

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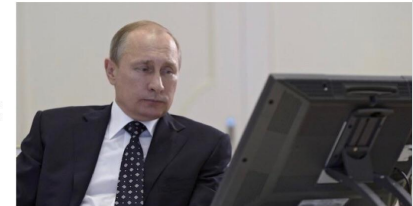


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# Contact Us!

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