Data Buddies Survey

Undergraduate Survey

Graduate Survey

What is it?
- Anonymized survey provided by CRA open now through Oct. 31st

Why is it important?
- Your feedback gives department real-time data on curriculum, pedagogy, student support and cultural climate from student P.O.V.

What's in it for you?
- Completion of survey means raffle entry and chance to win Amazon gift card

***Check your email for more details***

Malware

COMP 435
Fall 2017
Prof. Cynthia Sturton

Spam

Monetizing Spam

- Advertising
- Phishing
- Scams
- Stock price manipulation
- New bots
Monetizing Spam

- 60% -- 90% of all email
- 10s of billions of spam messages
- Most spam is never delivered
- Success rates:
  - 1/200,000 (0.0005%) malware hit rate
  - 1/12,000,000 (0.0000083%) purchase
- Revenue: $1.5-2M/year

Phishing, Spear Phishing

- Trick the recipient into taking unsafe action

Email Attack Countermeasures

- User vigilance
- Filtering by email providers

Denial of Service
Attacks on Availability

- Overload capacity
- Block access ransomware
- Component failure

Overloading Capacity

- Ping of Death
- Smurf
- SYN Flood
- DDOS

Ping

- Internet Control Message Protocol (ICMP)
- Send & Reply
- Tests reachability and availability of destination

Ping of Death
Smurf

TCP Protocol

SYN Flood: Attack on TCP Protocol

Underground Economy
Distributed Denial of Service

Threats to the Underground Economy

- Identification and authentication
- Single point of failure
- No honor among thieves