CERAS

The Center for Education and Research in Information Assurance and Security

Deception in Computing - Where and how it has been used

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Motivation

- Survey how deception is used in computing
- Learn how to efficiently use deception in different areas of computing, including computer defense

Research Questions

- Traditionally, where and how has deception been used to improve computer systems?
- What are some ineffective uses of deception and how lacksquarecan they be improved?

Performance

- Benefit
 - Technology matches



- human perception
- Technology is easier to \bullet work with and control
- Limitation \bullet
 - Resource intensive \bullet
 - Debugging becomes \bullet
 - more complex

- RAID
- Emulators
- Dropping packets **HCI** [1]
- Progress bar
 - during
- downloads
- Skype static

Robotics

• Artificially intelligent machines



Attack

Smurf attack

Medical

- Rehab machines
- Prosthetic limbs

Defense



- Can be used ethically to identify malicious individuals
- Limitation
 - Getting caught usually results in punishment
- 1. Eytan Adar, Desney S. Tan, and Jaime Teevan. 2013. Benevolent deception in human computer interaction. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13). ACM, New York, NY, USA, 1863-1872.

on security is lacking



