#### **USB** Forensics and Pentesting

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#### Human Interface Devices

## What is a HID

- Keyboard
- Mouse
- Joystick
- Anything with a button
- Something that moves bytes

## How does HID Work

- Boot protocol used before operating system loaded
- Report mode used once USB is up
- Report types
  - -Input
  - -Output (optional)
  - Features (optional)

### Endpoints

- Control
- Interrupt In
- Interrupt Out (optional)

# **HID Descriptors**

- Describe HID reports
- Boot protocol reports
  - Fixed length
  - Only for keyboard and mouse

# **Detecting HID Attack Devices**

- Many key loggers and HID attack devices are implemented with microcontrollers
- Most support only boot protocol
- Some have well known VID/PID
- Some attempt file transfer with rarely used protocol
- Some are composite devices

