Networking continued...
- Read the data sheets for the hardware
  - like the raspberry pi for this week's homework
  - don't fry your pi!
- Check connection stats
  - How can you tell which is the master/base station or drone?
  - wifi network
  - machine requesting IP from when?
- Issues: Can't connect to internet
  - use ethernet, wifi, externally, base station master
- What are possible issues with sending packets?
  - Duplicates, tampering, dropped
- TCP fixes all of these problems!
  - host to host connectivity
  - ports, open socket, close socket, make it look like a file
- Issues: might just completely fail, definitely slower
- UDP (user datagram protocol)
  - host-to-host connectivity, ports, checksums
  - lost packets, duplicate packets, out of order packets
- HTTP request/response
  - e.g., HTTP/1.0 404 Not Found when Stefan made a bad request
- How do we use names instead of IPs?
  - DNS (Domain Name System)
    - world-wide system for mapping IPs to names
    - need to know server
- Obtaining IP addresses: DHCP (Dynamic Host Config Protocol)
  - connect to new network
  - ask for an IP address
- NAT (Network Address Translation)
  - IP's are expensive! Share one IP with lots of people