

(Your) Great Ideas for Networked Applications

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Today's Agenda

1. Introductions
2. Contents of the class
3. Coding demo
4. Pick papers to present
5. Meet teammates

Introductions

My Interest in Networking



Networking is. . .

the Internet

Networking is. . .

the World-Wide Web

Skype

Facetime

Google Hangouts

Netflix

YouTube

Napster

BitTorrent

Bitcoin

Bolo

Doom

World of Warcraft

Minecraft

Google search

NFS

AFS

Dropbox

Tor

Facebook

Snapchat

Meteor

Spark

Wi-Fi, LTE, SDN, BGP, MIMO,
mesh-networking, full-duplex, medical
devices, undersea, deep space. . .

This class

1. My goal: Help **you** realize a great project
2. Teams of 2–3
3. Two-page proposal by January 21
4. Present in last week of class
5. Writeup

Some ideas

1. Filesystem that stores everything in pings in flight
2. sshfs, but keeps connection across change of IP address or loss of connection
3. Editor/player for YouTube “multivideos”
4. ISP in the sky: share multiple connections
5. Connect to every node in the Bitcoin network and...

Also...

1. Reading group
2. Congestion-control “contest” (in February)
3. Office hours: Wed., 2:30–3:30 p.m., Gates 282
4. Questions on Piazza (if of general interest)
5. I am here to help you!

Coding demo (sourdough)

Paper captains

Team discussions