

# [Ch.6 – college essay essay](https://assignbuster.com/ch6-college-essay-essay/)

ARPANETcreated in 1969 to help scientists communicate and share computer resources. UCLA, Stanford, u of utah, and u of cal santa barbara

NSF networkcreated in 1985 to create a larger network. Connected multiple LANS, not just mainframes. Created an internet (different than the Internet)

primitive command-line user interfacessend e-mail, transfer files, run scientific calculations on Internet supercomputers, difficult to use with limited access

new user friendly internet toolsintroduced in 1990s, internet accounts became available, monthly subscription fee

the Internetnot owned or operated by any single corporation or government

Internet backbonea network of high capacity communications links. Provides the main routes for data traffic across the Internet. Backbone links and routers- maintained by Network Service Providers

NAPs (Network access points)link and connect NSP equipment

ISP (Internet service provider)a company that offers Internet access to individuals, businesses, and smaller ISPs

modemhow you communicate with an ISP. communications device such as a modem

static IP addresspermanently assigned

dynamic IP addresstemporarily assigned

domain namea key component of web page addresses and email addresses

latencyelapsed time for data to make a round trip from point A to point B and back to point A. Ping and traceroute

asymmetric internet connectionwhen upstream speeds differ from downstream speeds

symmetric internet connectionwhen upstream and downstream speeds are the same

internet connection optionsfixed, portable, and mobile

dial up connectionfixed internet connection, uses a voiceband modem and telephone lines to transport data between your computer and your ISP

Voiceband modemconverts computer signals into audible analog signals that can travel over telephone lines. Speed is measured in bits per second

DSL connectionhigh speed, digital, always on connection, runs over standard phone lines. Speed varies

cable connectionhigh speed, always on connection, uses the same infrastructure as the cable television service

cable modemconvert computer signals into those that can travel over the CATV network

DOCSIS compliant cable modemssecures your computer from your neighbors

satellite internet servicehigh speed, always on, asymmetric, broadcasts signals to and from a personal satellite dish

satellite modemmodulates computer data signals into a frequency band to carry to the satellite dish. Satellite dish converts signals to another frequency, amplifies, and transmits

fixed wireless internet servicebroadcasts signals to offer internet access to large areas, always on, high speed

WiMAXmost well known fixed wireless standard. Transmits data to and from WiMAX antennas mounted on towers. Transmit data at 70 mbps

portable internet accessthe ability to easily move your internet service from one location to another

mobile internet accessoffers a continuous internet connection as you are walking or riding in a bus, car, train, or plane

wifi hotspotan area in which the public can access a wifi network that offers internet service. does not typically provide acceptable mobile internet access

portable WiMAXinternet acess is available to subscribers anywhere within a tower’s coverage. you use the same ISP whether you are at home or on the road. limited coverage

mobile WiMAXup and coming standard

WAP (wireless application protocol)provides internet access from handheld devices

wireless modemsprovides broadband data access by cellular service providers

cloud computingapps and data are available anytime, anywhere, on any device. Depends on a grid of servers, storage devices and protocols. SaaS

VoIP (voice over internet protocol)communication technology, a broadband internet connection is used to place telephone calls instead of the regular phone system

asynchronous types of communicationinternet forum, wiki, blog, tweet

grid computing systema network of computers harnessed together to perform processing tasks

distributed gridspecial type of grid where users voluntarily donate processing power to the grid. [email protected] project.

FTPfile transfer protocol. Rules to transfer files from one computer to another over any TCP/IP network

file sharingaka P2P file sharing, allows users to obtain files from other users located anywhere on the Internet

BitTorrentfile sharing protocol. Distributes the role of file server across a collection of dispersed computers

intrusionany access to data or programs by hackers, criminals, or other unauthorized persons

communications portdoorway that allows a computer to exchange data with other devices

port probeuses automated software to locate computers that have open ports and are vulnerable to unauthorized access

firewallsoftware or hardware designed to filter out suspicious packets attempting to enter or leave a computer

NAT (Network address translation)process router uses to keep track of packets and their corresponding private or public IP addresses

VPNhow you can create a secure connection for remote users. Employees who need access are given instructions, addresses, and passwords to make connections