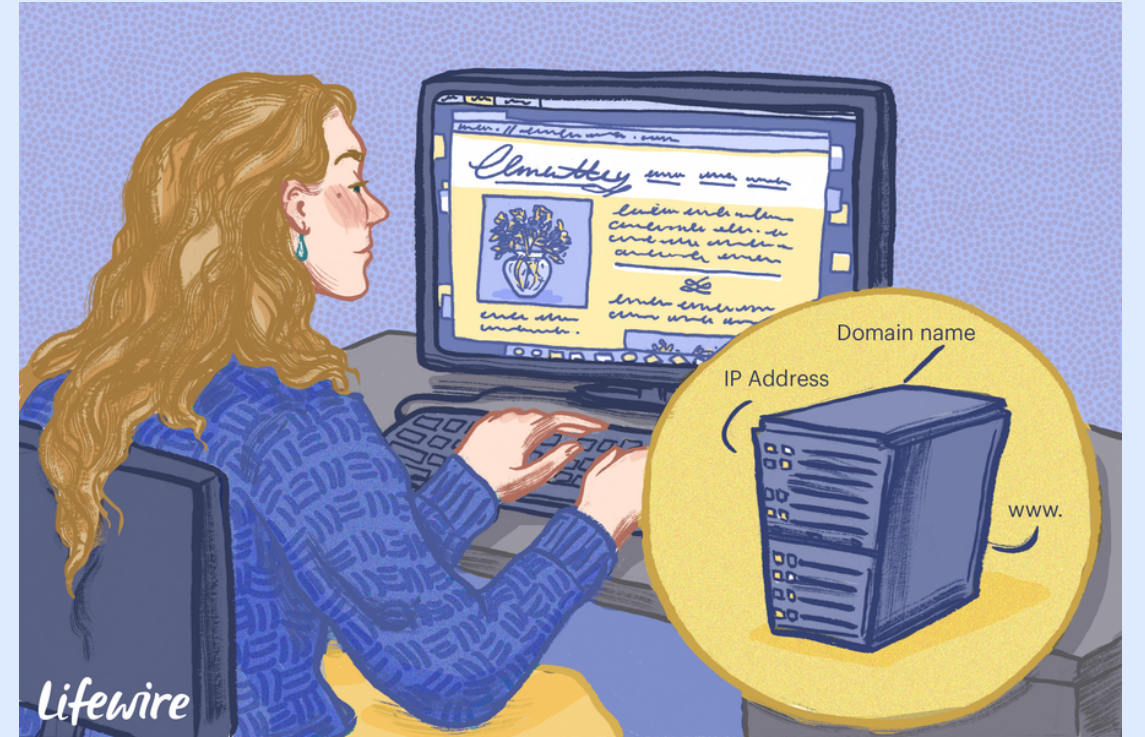


COMPUTING SYSTEMS

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PARALLEL
PROGRAMMING –

PROCESS OF BREAKING
DOWN LARGER TASKS INTO
SIMPLE ONES THAT CAN BE
CARRIED OUT
SIMULTANEOUSLY

DISTRIBUTED
COMPUTING –

A FIELD IN CS THAT
STUDIES COMPUTERS THAT
ARE ON DIFFERENT
NETWORKS AND PASS
MESSAGES TO EACH
OTHER

QUANTUM
COMPUTING –

COOL TECHNOLOGY THAT
TAKES THE LAWS OF
QUANTUM MECHANICS TO
SOLVE PROBLEMS TOO
COMPLEX FOR REGULAR
COMPUTERS



DNS –

AN ACRONYM; IT'S THE
PHONEBOOK OF THE
INTERNET

NETWORK -

**EX: INTERNET, WORLD
WIDE WEB**

A COMPUTER NETWORK IS
A SET OF COMPUTERS
SHARING RESOURCES
LOCATE PROVIDED BY
NETWORK NODES.

A UNIT OF DATA THAT'S
GROUPED TOGETHER AND
TRANSMITTED OVER A
COMPUTER NETWORK

- PACKET

PROTOCOL -

A SET OF RULES
TO DETERMINE HOW DATA
IS TRANSMITTED BETWEEN
DIFFERENT DEVICES ON
THE SAME NETWORK

HOW MUCH TIME IT TAKES
FOR A DATA PACKET TO
TRAVEL FROM ONE
DESIGNATED POINT TO
ANOTHER

- LATENCY

BRUTE FORCE ATTACK -

USING TRIAL AND ERROR
TO HACK SOMEONE

**EX: TYPING EVERY
COMBO OF 4 DIGITS TO
GET INTO SOMEONE'S
IPHONE**

REFACTORING

RESTRUCTURING CODE
WHILE NOT CHANGING ITS
— ORIGINAL FUNCTIONALITY
(THERE ARE MULTIPLE
WAYS TO WRITE THE SAME
PIECE OF CODE!)

A TYPE OF 'EVIL'
SOFTWARE THAT SPREADS
BETWEEN COMPUTERS AND
CAUSES DAMAGE TO DATA

— COMPUTER VIRUS

**EX: MARY OPENED A "WIN
A FREE IPHONE" LINK,
TYPED IN HER PASSWORD
AND HER DATA IS NOW
CORRUPTED**

RANSOMWARE

— BAD SOFTWARE THAT
THREATENS TO PUBLISH
THE PERSON'S PERSONAL
DATA IF THEY DONT PAY
\$\$\$\$

GROUPING DATA INTO
PACKETS THAT ARE
TRANSMITTED OVER A
DIGITAL NETWORK

— PACKET SWITCHING

KEYLOGGER —

A PROGRAM THAT
RECORDS EVERY
KEYSTROKE MADE BY A
COMPUTER USER,
ESPECIALLY TO GAIN
ACCESS TO PASSWORDS

HEURISTIC –

A TECHNIQUE DESIGNED FOR SOLVING A PROBLEM MORE QUICKLY WHEN THE CLASSICAL METHODS ARE TOO SLOW

THE MEASURE OF A COMPUTER'S ABILITY TO INCREASE OR DECREASE IN PERFORMANCE AND COST IN RESPONSE TO CHANGES IN APPLICATION AND SYSTEM PROCESSING DEMANDS.

BANDWIDTH –

– SCALIBILITY

A MEASUREMENT INDICATING THE MAXIMUM A COMMUNICATIONS LINK CAN HANDLE TO TRANSMIT DATA OVER A NETWORK CONNECTION IN A GIVEN AMOUNT OF TIME.

A PHENOMENON THAT OCCURS WHEN AN ALGORITHM PRODUCES RESULTS THAT ARE ALREADY PREJUDICED DUE TO ERRORS IN ASSUMPTIONS IN THE MACHINE LEARNING PROCESS

– BIAS IN COMPUTING

FAULT TOLERANCE –

THE ABILITY OF A SYSTEM TO CONTINUE OPERATING WITHOUT INTERRUPTION WHEN ONE OR MORE OF ITS COMPONENTS FAIL (SPIDER WEB THING).

THREATS TO THE SAFETY OF THE COMPUTER, CAN BE PHYSICAL OR ELECTRONIC SUCH AS A VIRUS

**EX: COMPUTER VIRUS,
MARY'S CHROMEBOOK
GETS STOLEN**

– SECURITY THREATS TO SYSTEMS

CROWDSOURCING - RESTRUCTURING CODE WHILE NOT
CHANGING ITS ORIGINAL
FUNCTIONALITY (THERE ARE
MULTIPLE WAYS TO WRITE THE
SAME PIECE OF CODE!)

A PROTECTION OF
ORIGINAL WORKS
SYMBOL, SO NO ONE
STEALS THE WORKS

- **COPYRIGHT**

**EX: I TRIED TO TAKE
KATY PERRY'S SONG AND
PUT IT IN MY YT VIDEO
WHEN I WAS 9 BUT IT
GOT COPYRIGHTED :(**

TCP/IP - COMMUNICATION PROTOCOLS
THAT LINK DEVICES ON THE
INTERNET

UDP SPEEDS UP
TRANSMISSIONS BY
MAKING THE DATA
MESSAGES TRANSFER
BEFORE THE RECEIVER
SAYS YES

- **UDP**

PHISHING - ATTEMPTING TO ACQUIRE
SENSITIVE DATA, EX:
BANK ACCOUNT NUMBERS,
THROUGH EMAILS OR
PHONE CALLS
PRETENDING TO BE
SOMEONE ELSE

**EX: SOMEONE CALLED
PHIL, SAYING THEY'RE
THE BANK AND NEED HIS
ACCOUNT INFO OR ELSE
ALL MONEY WILL BE
WITHDRAWN. PHIL GIVES
THE INFO AND FINDS OUT
THAT HE WAS UNDER A
PHISHING ATTACK, AND
THE "BANK" TOOK HIS
MONEY**

MALWARE – ANY SOFTWARE DESIGNED
FOR BAD INTENTIONS
(MAL!!)

A SHARED PLACE ACROSS
WHICH TWO OR MORE
SEPARATE COMPONENTS – INTERFACE
OF A COMPUTER SYSTEM
EXCHANGE INFORMATION

CLOUD COMPUTING –

ALL THINGS COMPUTER BUT ON
THE INTERNET! ACCESSING DATA
AND PROGRAMS ON THE
INTERNET, FOR EXAMPLE

REDUCING THE CODE
TO MAKE IT MORE
SIMPLE WHILE IT STILL – ABSTRACTION
HAS THE SAME
FUNCTIONALITY

BIG DATA – LARGER, MORE COMPLEX
DATA SETS, ESPECIALLY
FROM NEW DATA
SOURCES

SOURCES

[HTTPS://WWW.LIFEWIRE.COM/WHAT-IS-A-DNS-SERVER-2625854](https://www.lifewire.com/what-is-a-dns-server-2625854)

[HTTPS://WWW.FORBES.COM/SITES/IBM/2020/01/16/THE-QUANTUM-COMPUTING-ERA-IS-HERE-WHY-IT-MATTERSAND-HOW-IT-MAY-CHANGE-OUR-WORLD/?SH=2FD2FE1A5C2B](https://www.forbes.com/sites/ibm/2020/01/16/the-quantum-computing-era-is-here-why-it-matters-and-how-it-may-change-our-world/?sh=2fd2fe1a5c2b)