CSc 137 - Computer Organization
Fall 2020
Team Technical presentation
(40 points total)

Some Topics for Team Presentation

Below are some suggestions on topics for your group/team presentation. You are welcome and I highly encourage you to pick any pertinent topic that is related to this course i.e. Computer Architecture (Digital Technology) and how they are utilized in IT industry and Technology/factory automation.

The idea here is for students to learn how theory ties to real world applications and get insight on how digital electronics/computer architecture is changing the world.

The time allotted for group/team presentation will be 15 minutes, which will start after third week of instructions towards end of class. Due to online classes, teams will be assigned but will revert to students picking their own team during in class lectures.

I do not require any student to have WebCam for this technical presentation. Computer audio is fine and if anyone does not have an audio capability, please let me know and I will pair you with someone who does or other alternative method will be provided to you. In these challenging times, please let me know what I can do to make you successful in this class.

Nanoparticles

A nanoparticle is a material used for making computer hardware components with a motive to boost the density of solid-state memory. The complete process is performed by followed a process known with the name of nanotechnology. It lets the memory consume lower power along with reducing chances of failure.

Intel Architecture

The term Intel® architecture encompasses a combination of microprocessors and supporting hardware that creates the building blocks for a variety of computing systems.

AMD architecture

The AMD64 architecture is a simple yet powerful 64-bit, backward-compatible extension of the industry-standard (legacy) x86 architecture. It adds 64-bit addressing and expands register resources to support higher performance for recompiled 64-bit programs, while supporting legacy 16-bit and 32- bit applications and operating systems without modification or recompilation

CORBA

CORBA (Common Object Request Broker Architecture) is a special architecture whose main job is explaining a unique mechanism for better distribution of objects over a certain network. It let them make communication with each other without any platform and language boundary. This specification created by Object Management Group.

Digital Signature

A digital signature can be called an electronic signature used for guaranteeing the authenticity of a digital document. It is a very useful technique that mainly used for validating authenticity along with integrating certain software, a message or a document

3D Internet

3D Internet is a next level and advanced method where two powerful technologies- the Internet and 3D graphics are combined. The main purpose of this ultra-level technique is providing realistic 3D graphics with the help of internet. Also known as Virtual Worlds, this interactive and engaging system is used by top organizations like Microsoft, Cisco, IBM, etc.

5G Technology

5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users. Higher performance and improved efficiency empower new user experiences and connects new industries.

5 Pen PC Technology

5 Pen PC Technology is simply a cluster of gadgets that comes with a great sort of features. It includes a virtual keyboard, projector, personal ID key, a pen-shaped mobile phone, and a camera scanner. Using this technology, a crystal-clear digital copy of handwritten details can be created.

Android

Android is an operating system created mainly for smartphone and tablets. It is a brilliant technology that allows the users to perform a variety of functions like using GPS for checking traffic areas, etc. Android is the mastermind behind everything ranging from top tablets to 5G phones.

AppleTalk

AppleTalk is a networking protocol used in Mac computer systems and devices for making communication. It was originally introduced in 1984 by Apple and get replaced by TCP/IP in 2009 with the release of macOS X v10.6.

Blue Eyes Technology

Blue Eyes is an advanced technology that created with a mission to develop computational machines with sensory powers. There is a non-obtrusive sensing technique used by this technology with the use of latest video cameras and microphones. In simple words, it is a machine that understands the requirements of users and what he/she needs to see.

Bluejacking

Bluejacking is a technique used by hackers to send messages to a different user with the help of Bluetooth connection. The most common use of this technology is sending unwanted images, text messages or sounds to other Bluetooth equipment in the network range.

Cloud Computing

Cloud computing is an advanced method for delivering resources by utilizing the internet. This technology has made it possible to access their resources by saving them to a remote database. It eliminates the burden to store files on an external device.

Cybercrimes

Cybercrime is a crime form where the computer is utilized as a weapon. It includes things like spamming, hacking, phishing, etc. On top of that, computers are used for stealing personal data of individuals in these types of crimes. Despite the advancement in technology, the frequency of cybercrimes is increasing every year.

Data Warehousing

Data Warehousing is a technique for gathering and controlling data from a great sort of resources with a motive to give useful insights on the business. This technology is used for connecting and analyzing business data so that it gets available to the businesses within a short time.

Direct Memory Access (DMA)

Direct Memory Access is a computing technique used for the transfer of data from RAM in computer to a different area in the system without CPU processing. In simple words, its main duty is to transfer or get data to or from main memory so that memory operations become faster.

Mobile Number Portability (MNP)

Mobile Number Portability (MNP) is an advanced level technology using which the mobile phone subscribers can change their cellular operator without changing their number. It was launched in Singapore about two decades ago, but since then expanded to almost every country across the globe. The complete process to change operator is very customer-friendly and easier.

Distributed Systems

A distributed system can be called a cluster of computer systems that work in collaboration with each other to look like as a single entity to the end-user. All the computers in the system are connected through a distribution middleware. The main purpose of this system is sharing various resources to the users with a single network.

Scada

SCADA is a computer technology used for collecting and checking real-time data. It is fully abbreviated as Supervisory Control and Data Acquisition. The main purpose of this application can be founded in telecommunications, energy, gas refining, and transportation industry.

LAN WAN MAN

LAN (Local Area Network) is a cluster of network devices that are connected with each other in the same building. MAN (Metropolitan Area Network) performs the same job but covers a large area than LAN like a city or town. WAN (Wide Area Network) covers a bigger area than both LAN and MAN.