**Brospeaks - Tech Seminar Topics**

1. **Mobile Computing and its Applications**

Mobile Computing is a software technology that transfers media through wireless device data, voice, and video without having any fixed connection. The key elements that are involved in this process are mobile software, mobile hardware, and mobile chips.

1. **Rover Mission Using JAVA Technology**

Java technology today is good for general-purpose computing and GUIs. This technology enables the rovers to maneuver on the moon or outer space as per the commands given at the space stations. It is equipped with control systems working through diverse software programs.

1. **Pill Camera in Medicine**

With the technological advancements in the field of Medical Science, this has become one of the most popular seminar topics nowadays. It is an instrument with a tiny camera that resembles a vitamin pill and is used primarily throughout the endoscopy process. This capsule shape camera captures pictures of the digestive system and sends them to the recorder.

1. **Postulates of Human-Computer Interface**

Human-Computer Interface is a manual intercommunication performed in designing, executing, and assessing processes of a computer system. This kind of technology is generally practiced in all types of disciples where a computer installation is involved. The most well-known platform to perform this process is the Association for Computer Machinery (ACM).

1. **Software Testing**

It is a prominent technology employed for checking the quality and performance of a software application. The main purpose of this process is to check whether the developed application satisfies the testing parameters of the software. Also, it finds out the negative issues to secure the application becomes defect-free.

1. **IT in Space**

Information Technology is used for a wide range of applications in the field of Space Science and Technology. Extending from exploratory fly-bys to rocket launches, the prospects are immense.

1. **Interconnection of Computer Networks**

A network or a group of computers helps in the transfer of information packets among network computers and their clients. This is transmitted from any source node to the target destination node.

1. **Random Number Generators**

With its applications spanning across areas like cryptography and security, Random Number Generators - generate the numbers either through hardware-based analysis [termed as RNG] or do so by assessing external data like mouse clicking.

1. **Hamming Cut Matching Algorithm**

Hamming Cut Matching Algorithm is a set of programs that are meant to execute the functions of a firmware component and its associated algorithm. It reduces the comparison time for matching the iris code with a database so that we can apply iris verification in case of massive databases like the voting system.

1. **Cryptocurrency**

Cryptocurrency is a digital currency secured by cryptography making it almost impossible to counterfeit. It is electronic money which hides the identification of the users. Bitcoin, often described as a cryptocurrency, a virtual currency or a digital currency - is a type of money that is completely virtual. It's like an online version of cash. You can use it to buy products and services, but not many shops accept Bitcoin yet and some countries have banned it altogether.

1. **Smart Textiles**

Smart Textiles are fabrics that can sense and react to environmental stimuli, which may be mechanical, thermal, chemical, biological, and magnetic amongst others. They also automatically track the training progress and monitor the physical state.

1. **Voice Morphing**

Voice Morphing is the technique to alter one’s voice characteristics to another person’s. Voice Morphing Technology helps to transform or change the tone, and pitch or add distortions to the user’s voice.

1. **Wireless USB**

It is a high-bandwidth wireless USB that connects peripherals like printers, sound cards, and video monitors.

1. **Zigbee technology**

Zigbee is a wireless technology that works on low-power wireless IoT networks and also is affordable. It can have a battery life of several years.

1. **Fog Computing**

Fog Computing is a process by which multiple devices are allowed to communicate with each other using local networks. It improves efficiency, tightens security and reduces the data used while cloud processing and storage.

1. **Crypto Watermarking**

Crypto Watermarking is done to protect the content shared from plagiarizing and to authenticate the ownership and source of origin of the content. This also reduces the chances of tampering with data.

1. **IP Address Spoofing**

IP Address Spoofing is the process of creating Internet Protocol packets with a false source IP address, to trick other networks by entering as a legitimate entity.

1. **Screenless Display**

Screenless display is a developing display technology that allows users to display and transmit data without the use of a screen or projector. Several firms are spending to get patents for their innovative screen-less display technology.

1. **Li-Fi Technology**

LiFi (light fidelity) is a bidirectional wireless system that transmits data via LED or infrared light uses radio frequency, LiFi technology only needs a light source with a chip to transmit an internet signal through light waves.

1. **Microprocessor and Microcontrollers**

Microprocessor consists of only a Central Processing Unit, whereas Micro Controller contains a CPU, Memory, I/O all integrated into one chip. The microprocessor is useful in Personal Computers whereas Micro Controller is useful in an embedded system.

1. **Silverlight**

Microsoft Silverlight (Silverlight) is an application framework for writing and running rich internet applications, with features and purposes similar to those of Adobe Flash. The run-time environment for Silverlight is available as a plug-in for most web browsers.

1. **Green Computing**

Green computing (also known as green IT or sustainable IT) is the design, manufacture, use and disposal of computers, chips, other technology components and peripherals in a way that limits the harmful impact on the environment, including reducing carbon emissions and the energy consumed by manufacturers, data centers

1. **MANET**

The full form of MANET is **Mobile Ad Hoc Network**. MANET is a wireless network of decentralized type. It does not rely on an access point in the managed infrastructure or a pre-existing infrastructure, like routers in wired networks. It is, thus, ad hoc. MANETs are mobile, and they wirelessly connect to various networks.

1. **Tamper Resistance**

Tamper resistance is the ability of a device to defend against a threat that has the objective to compromise the device and or the data processed by the device. Tamper resistance is applicable to cryptographic modules, but this characteristic could also be important for non-cryptographic devices that need to protect intellectual property, personal or financial data, or provide evidence of the device integrity for trust or warranty purposes.

1. **Blue Brain**

Blue brain is the name of the world’s first virtual brain. That means a machine can function as human brain. Today scientists are in research to create an artificial brain that can think, response, take decision, and keep anything in memory. The main aim is to upload human brain into machine.

1. **Intelligent Highway**

Smart highway and smart road are several ways in which technologies are incorporated into roads. Smart highways are used to improve the operation of connected and autonomous vehicles (CAVs), for traffic lights and street lighting, and for monitoring the condition of the road, traffic levels and the speed of vehicles.

An intelligent vehicle could be defined as a vehicle that is capable of taking information about its state and/or the environment, processing that information, and making decisions, providing information, and/or acting.

1. **DOS and DDOS**

DOS Stands for Denial of service attack. A DOS attack is characterized by using a single computer to launch the attack. A distributed denial-of-service (DDOS) attack is a type of DOS attack that comes from many distributed sources, such as a BOTNET DDOS attack.

DDOS Stands for Distributed Denial of service attack. In Dos attack single system targets the victim system. In DDOS multiple systems attacks the victims system.

1. **Blue Eyes Technology**

Blue eyes technology aims at creating a computer that has the abilities to understand the perceptual powers of the human being by recognizing their facial expressions and react accordingly to them. All these perceptual capabilities are embedded in the gadgets using the Blue Eyes Technology. Blue eyes technology is the Blue refers to Bluetooth and Eye refers to seeking information from our feelings. This technology was created to give computer human power like sensing the emotions of the User. This technology can identify our emotions and understand our emergency situation

1. **RedTacton**

RedTacton is a user-friendly persuasive technology that establishes a communication between people and objects in a closer proximity. RedTacton is a new. Human Area Networking (HAN) technology which was introduced by Nippon telegraph and Telephone Corporation (NTT's) that uses the human body surface is a high speed and safe network transmission path.

1. **Blockchain Technology**

Blockchain is a system of recording information in a way that makes it difficult or impossible to change, hack, or cheat the system. A blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain.