

Seminar topics

Topics by:

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E-commerce	E-commerce is the application of information technology to support business processes and the exchange of goods and services. E-cash came into being when people began to think that if we can store, forward and manipulate information,..
Plastic circuitries	As researchers work towards the creation of plastic-based alternatives in order to to make technology more pervasive, silicon wafers might soon be biting the dust.
Wireless Markup Language	When its time to find out how to make content available over WAP, we need to get to grips with its Markup Language. ie, WML. WML was designed from the start as a markup language to describe display of content on small screen devices.
B-ISDN Reference Model	ATM makes B-ISDN a reality. The Integrated services Digital Network (ISDN) evolved during the 80's. It carried a basic channel that could operate at 64kbps (B-channel) and combinations of this and others (D-channels) formed the basis of communication on the network.
Genetic engineering	Genetic programming has recently emerged as an important paradigm for automatic generation of computer programs. GP combines metaphors drawn from biological evolution with computer science techniques in order to produce algorithms and programs automatically.
iSCSI-Future of Network Storage	iSCSI Defined Internet SCSI (iSCSI) is a draft standard protocol for encapsulating SCSI command into TCP/IP packets and enabling I/O block data transport over IP networks. iSCSI can be used to build IP-based SANs.
PolyBot - Modular, self-reconfigurable robots	Modular, self-reconfigurable robots show the promise of great versatility, robustness and low cost. Polybot is a modular, self-reconfigurable system that is being used to explore the hardware reality of a robot with a large number of interchangeable modules.
Ubiquitous computing	Ubiquitous computing names the third wave in computing, just now beginning. First were mainframes, each shared by lots of people.
Quantum teleportation	Teleportation is the name given by science fiction writers to the feat of making an object or person disintegrate in one place while a perfect replica appears somewhere else.
Grid Data Farm for Petascale	High performance and data-intensive computing and networking technology has become a vital part of large-scale scientific research

	projects in areas such as high energy physics.
Digital Visual Interface	Digital Visual Interface adoption accelerates as Industry prepares for next wave of DVI-Product compliant.
Management Information System	A Management Information System (MIS) is an integrated, user-machine system for providing information to support operations, management and decision-making functions in an organization.
Teleportation	Teleportation is the transmission of a life-size image of a person to appear within a room at a distant location where the person has a telepresence for engaging in natural face to face communication with people at the distant location.
Blue Eyes	Animal survival depends on highly developed sensory abilities. Likewise, human cognition depends on highly developed abilities to perceive, integrate, and interpret visual, auditory, and touch information.
Security threats in the World Wide Web	This analysis the security threats in the World Wide Web and the excellent solutions available in the industry. As you know that there's at least one person out there gunning for your system.
Visual Neuro Prosthetics	Recent technological breakthroughs in materials and micro fabrication technologies afford neurosurgeons ophthalmologists and engineers the opportunity to reconsider the prospect of providing a useful visual sense to the profoundly blind.
Multiple client's communication	Sockets are one of the most basic mechanisms of computer networking. Much of today's software relies on low level socket technology. This project includes creating a server application and a client application which uses sockets for communication.
Rapid prototyping	In the manufacturing arena, productivity is achieved by guiding a product from concept to market quickly and inexpensively.
Kerberos	In a non-networked personal computing environment resources and information can be protected by physically securing the personal computer.
Sun Spot	Sun SPOT (Sun Small Programmable Object Technology) is a wireless sensor network (WSN) mote developed by Sun Microsystems. The device is built upon the IEEE 802.15.4 standard.
Raid technology	Privacy of personal data is an illusion in today's complex society. With only passwords, or Social Security Numbers as identity or security measures every one is vulnerable to invasion of privacy or break of security.
Night vision technology	Night vision technology was developed by the US defense department mainly for defense purposes ,but with the development of technology night vision devices are being used in day to day lives .
Artificial passenger	An artificial passenger (AP) is a device that would be used in a motor vehicle to make sure that the driver stays awake.

An Introduction to Artificial Life	Artificial Life also known as alife or a-life, is the study of life through the use of human-made analogs of living systems.
Agile Software Development Methodologies	A software methodology consists of rules and practices for creating the computer programs. Heavyweight methodologies have a lot of such rules and practices,.
Position-Based Routing	Mobile ad-hoc networks (MANETs) are becoming more popular due to their ability to model interesting aspects of real wireless networks. It is easy and cheap to build such networks because no other equipment or infrastructure are required besides the mobile devices.
Cryptovirology	Cryptovirology is a field that studies how to use cryptography to design powerful malicious software. It encompasses overt attacks such as cryptoviral extortion where a cryptovirus,.
Artificial Intelligence for Speech Recognition	Artificial Intelligence (AI) involves two basic ideas. First, it involves studying the thought processes of human beings. Second, it deals with representing those processes via machines (computers, robots, etc).
Souped-Up Mesh Networks	In an effort to make a better wireless network, the Cambridge MA-based company BBN Technologies announced last week that it has built a mesh network that uses significantly less power than traditional wireless networks, such as cellular and Wi-Fi, while achieving comparable data-transfer rates.
Multicast Routing Algorithms and Protocols	In the age of multimedia and high-speed networks, multicast is one of the mechanisms by which the power of the Internet can be further harnessed in an efficient manner.
Softwear Computing	In this talk, we introduce computational aspects of softwear, specifically fabric and body-based gestural controllers for realtime, time-based media.
An Off-Line Unconstrained Handwriting Recognition System	The recognition of off-line unconstrained handwriting is one of the most challenging and interesting problems in Optical Character Recognition (OCR). Although many research have been done in this field for about 40 years,.
Fault-Tolerant Broadcasting and Gossiping in Communication Networks	Broadcasting and gossiping are fundamental tasks in network communication. As communication networks grow in size, they become increasingly vulnerable to component failures.

Parallel OLAP for Relational Database Environments	On-line Analytical Processing (OLAP) has become a fundamental component of contemporary decision support systems and represents a means by which knowledge workers can efficiently analyze vast amounts of organizational data.
Data Sharing and Querying for Peer-to-	Peer-to-peer computing consists of an open-ended network of distributed computational peers, where each peer shares data and

Peer Data Management Systems	services with a set of other peers,
Design Pattern Visualization for Program Comprehension	In recent years the usage of design patterns is gaining interest in the software design community. Design patterns provide successful and proven solutions for design problems and common terminologies.
Sun High-Performance Computing Solutions	ENCS is looking at the possibility of acquiring a high performance computing system. This system will be maintained by the ENCS IT Group and be available for use for everyone.
Traffic Pulse Technology	The Traffic Pulse network is the foundation for all of Mobility Technologies® applications. This network uses a process of data collection, data processing,.
PLATONIS - A Validation Platform for Protocols and Services	Advance in network technology leads to the design of new protocols and services. In order to assure successful communication among those new products,.
Positive Extension Matrix	The extension matrix method is that at first, we find the distinguishing between the positive examples and negative examples. The extension matrix is used to represent those distinguishes,.
XML Data Compression	XML is a popular meta-language that facilitates the interchange and access of data. However, XML's verbose nature tends to increase the size of a data file by as much as ten-fold.
Aspect Oriented Programming	Object-oriented programming (OOP) has been presented as a technology that can fundamentally aid software engineering, because the underlying object model provides a better fit with real domain problems.

Topics by:

Avinash Panwar

1	A T M	These computers include the entire spectrum of PCs, through professional workstations upto super-computers. As the performance of computers has increased, so too has the demand for communication between all systems
2	Hyper-Threading Technology	Hyper-Threading technology is a groundbreaking innovation from Intel that enables multi-threaded server software applications to execute threads in parallel within each processor in a server platform. The Intel® Xeon™ processor family uses
3	Infini Bridge	InfiniBand is a powerful new architecture designed to support I/O connectivity for the Internet infrastructure. InfiniBand is supported by all the major OEM server vendors as a means to expand beyond and create the next generation
4	Intrusion Detection System	In the last three years, the networking revolution has finally come of age. More than ever before, we see that the Internet is changing computing as we know it. The possibilities and opportunities
5	WiFiber	Atop each of the Trump towers in New York City, there's a new type of wireless transmitter and receiver that can send and receive data at rates of more than one gigabit per second -- fast enough to stream 90 minutes
6	Wi-Fi	The typical Wi-Fi setup contains one or more Access Points (APs) and one or more clients. An AP broadcasts its SSID (Service Set Identifier, Network name) via packets that are called beacons, which are broadcasted every 100 ms
7	Genetic	Genetic programming (GP) is an automated

	programming	methodology inspired by biological evolution to find computer programs that best perform a user-defined task. It is therefore a particular machine learning technique that uses an evolutionary
8	OFDMA	Orthogonal Frequency Division Multiple Access (OFDMA) is a multiple access scheme for OFDM systems. It works by assigning a subset of subcarriers to individual users
9	Hybrid ARQ	Hybrid ARQ (HARQ) is a variation of the ARQ error control method, which gives better performance than ordinary ARQ, particularly over wireless channels, at the cost of increased implementation complexity
10	Symfony	Symfony is a web application framework for PHP5 projects. It aims to speed up the creation and maintenance of web applications, and to replace the repetitive coding tasks by power, control and pleasure
11	XForms	XForms is an XML format for the specification of a data processing model for XML data and user interface(s) for the XML data, such as web forms. XForms was designed to be the next generation of HTML / XHTML forms.
12	Resource Description Framework	Resource Description Framework (RDF) is a family of World Wide Web Consortium (W3C) specifications originally designed as a metadata model using XML but which has come to be used as a general method.
13	OWL	OWL is an acronym for Web Ontology Language, a markup language for publishing and sharing data using ontologies on the Internet. OWL is a vocabulary extension of the Resource Description Framework (RDF)
14	XBL	XBL or eXtensible Bindings Language is used to declare the behavior and look of XUL widgets and XML elements. In XUL one defines the user interface layout of an application

15	Representational State Transfer	Representational State Transfer (REST) is a software architectural style for distributed hypermedia systems like the world wide web. The term originated in a 2000 doctoral dissertation about the web written by Roy Fielding
16	Ruby on Rails	Ruby on Rails, often called RoR, or just Rails written in , is an open source web application frameworkRuby that closely follows the Model-View-Controller (MVC) architecture
17	TurboGears	TurboGears is a Python web 'megaframework' created by bringing together a number of mature components such as MochiKit, SQLAlchemy, CherryPy and Kid, along with some TurboGears.
18	WDDX	WDDX (Web Distributed Data eXchange) is a programming-language-neutral data interchange mechanism to pass data between different environments and different computers. It supports simple data types such as number
19	Fusebox	Fusebox is a popular web development framework for ColdFusion and other web development languages. Fusebox provides Web application developers with a standardised, structured way of developing..
20	Contiki	Contiki is a small open source, yet fully featured, operating system developed for use on a number of smallish systems ranging from 8-bit computers to embedded microcontrollers..
21	AJAX	Ajax, shorthand for Asynchronous JavaScript and XML, is a web development technique for creating interactive web applications. The intent is to make web pages feel more responsive by exchanging small amounts..
22	JHDL	JHDL (Java Hardware Description Language) is a low level hardware description language, focused primarily on building circuits via an Object Oriented approach that bundles collections of gates into Java objects.

23	SIP	Session Initiation Protocol (SIP) is a protocol developed by IETF MMUSIC Working Group and proposed standard for initiating, modifying, and terminating an interactive user session that involves multimedia elements such as video
24	BitTorrent	BitTorrent is the name of a peer-to-peer (P2P) file distribution client application and also of its related file sharing protocol, both of which were created by programmer Bram Cohen. BitTorrent is designed to distribute large amounts
25	Viper IBM Db2 9	With the release of IBM's DB2 9, formerly known as Viper and currently in Release Candidate, IBM also plans to unveil the new DB2 9 Developer Workbench. DB2 Viper brings you the best database solution for XML
26	Cognitive architecture	A cognitive architecture is a blueprint for intelligent agents. It proposes (artificial) computational processes that act like certain cognitive systems, most often, like a person, or acts intelligent under some definition
27	Mobile agent	In computer science, a mobile agent is a composition of computer software and data which is able to migrate (move) from one computer to another autonomously and continue its execution on the destination computer.
28	IP Multimedia Subsystem	The IP Multimedia Subsystem (IMS) is a standardised Next Generation Networking (NGN) architecture for telecom operators that want to provide mobile and fixed multimedia services.
29	Choreography	Choreography, in a Web services context, refers to specifications for how messages should flow among diverse, interconnected components and applications to ensure optimum interoperability.
30	Adaptive Partition Scheduler	Adaptive Partition Schedulers are a relatively new type of partition scheduler, pioneered with the most recent version of the QNX operating system.

Topics By:

Nilima Fulmare

1. Neural-Genetic Algorithm
 2. Genetic Algorithm for Data Mining (An introduction and
 3. Application)
 4. Encryption and compression of text using colors
 5. Cloud Computing Introduction
 6. Grid Technology Introduction
 7. Latex for Smart Documentation
 8. Types of Sequencer for Ordering
 9. Informal Methods of computation
 10. Formal Methods of computation
 11. Quantum Cryptography
 12. Touch Screen Technology
 13. Jini-Advanced Set of Network Protocols
 14. Face Recognition Technology
 15. DNA Computing in Security
 16. Steganography
 17. Cluster Computing
 18. Data Mining Concept and Models
 19. RSA Algorithm
 20. Collision Resolution Techniques of Hashing
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Topics By:

Deepak Gaur

Ashutosh Gupta

1. Wireless Sensor Networks (WSN): Challenges and Opportunities
 2. Algorithmic aspects / issues in Wireless Sensor Networks (WSN)
 3. Design Issues in Routing Protocols for Wireless Sensor Networks (WSN)
 4. Cross layer Design for Wireless Sensor Networks (WSN)
 5. Applications of Wireless Sensor Networks (WSN) in management of Power and Energy System
 6. Data Management for Wireless Sensor Networks (WSN)
 7. Event Detection in Wireless Ad Hoc Sensor Networks
 8. Self Organization in Wireless Sensor Networks (WSN): Coverage, Connectivity and Forwarding
 9. Web based Knowledge Gathering: Towards an Intelligent Web
 10. Security Issues in Wireless Sensor Networks (WSN)
 11. Trust Management in Wireless Sensor Networks (WSN)
 12. Energy Aware Reliable Real Time System
 13. Real Time Embedded System Design using FPGA
 14. ARM: Introduction and Architecture
 15. Applications based Embedded Systems: Biotech and Bio-Informatics
 16. Multi Core Evolution, Parallelism and Programming
 17. Effective Data Path & Control Design
 18. Basic Parallel Architecture – SIMD array Processors
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