

BIOINFORMATICS

Bioinformatics is the application of information technology to the field of molecular biology. The term bioinformatics was coined by Paulien Hogeweg in 1978 for the study of infromatic processes in biotic systems. Over the past few decades rapid developments in genomic and other molecular research technologies and developments in information technologies have combined to produce a tremendous amount of information related to molecular biology. It is the name given to these mathematical and computing approaches used to glean understanding of biological processes. Common activities in bioinformatics include mapping and analyzing DNA and protein sequences, aligning different DNA and protein sequences to compare them and creating and viewing 3-D models of protein structures. The primary goal of bioinformatics is to increase our understanding of biological processes. What sets it apart from other approaches, however, is its focus on developing and applying computationally intensive techniques (e.g., data mining, machine learning algorithms, and visualization) to achieve this goal. Major research efforts in the field include sequence alignment, gene finding, genome, assembly, protein structure alignment, protein structure prediction, prediction of gene expression and protein-protein interaction, genome-wide association studies and the modeling of evolution.

Mohnish Mahobia, Lecturer, IT Deptt.



CAREER IN SPACE TECHNOLOGY

If you are interested in working in a field that involves studying the planets, the solar system and other aspects of the universe. Consider investigating the many opportunities for careers in space technology.

SPACE TECHNOLOGY CAREER OPPORTUNITIES -

While astronauts are first professionals that came to mind when most people think about careers in space technology. There are numerous other employment opportunities in this field. Astronauts make up only a very small number of all space technology workers. In order to enable oneself in taking up a career in space technology, space science or space applications, study of science subject such as mathematics, physics, chemistry at undergraduate level is necessary. Several Indian university and other institutions offer graduate/ post graduate/doctorate course in the disciplines of relevance to space technology space science and space application.

ISRO also employ B.Sc degree holders and Engineering, diploma holder. Job opportunities are also available for those whose possess industrial certificate in various trades/skill such as ET&T, E&I, Computer Electronics & Mechanical trades.

Besides ISRO/Centre of development of space, certain industries sectors too offer employment opportunities to those who are technically/professionally qualified and possess relevant skill and knowledge. The following is only indicate list of some of the discipline highly relevant in

ISRO'S ACTIVITIES FOR SCIENTISTS /ENGINEERS Aeronautical Engineering, Telecommunication Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Control System, Electrical Engineering, Electro-optics, Electronics, Material Science, Mechanical Engineering, Metallurgy Engineering, Metallurgy, Power System, Remote Sensing, Structure Engineering.

IN ABROAD WHERE TO FIND JOB OPPORTUNITIES IN SPACE TECHNOLOGY-

NASA JOBS- Visit the NASA Job website to such open positions within the U.S. National Aeronautic & Space Administration (NASA) & find out how to apply for federal jobs with the agency.

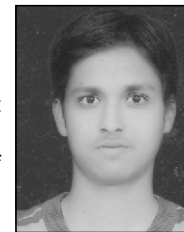
Vimal Kumar Verma, IV Sem. ETC



NOW, A WIRELESS HEART PUMP

SCIENTISTS have created what they claim is a wireless heart pump, there by avoiding the need for infection-prone power cables running through the chest and eventually offering an alternative to heart plantation. Previous heart pumps needed wires through the chest to get there power which was a source of serious infection in as many as 40 % of patients. Now, an international team has come up with a technology to power a wireless heart pump. According to the scientists, the wireless heart pump uses magnetic field to transfer power through a person's skin rather than using wire cables. The pump can be powered this way 24 hours a day for a person's lifetime. The scientists, led by Auckland university, have now floated a new company, TETCO, to take the technology to market for powering a wide range of devices implanted in human body. According to TETCO CEO, heart pump need a huge amount of power. and the only way to power current artificial heart pump is through a wire cable that goes via patient's stomach and chest. Scientists spell that wires cause serious infection, often leading to death in about 40% of patients. "This new wireless heart pump weights only 92 grams and measures just seven centimeters by three centimetres"

Manish Agrawal, IV Sem. E & I



LIFE STILL HAS A MEANING

If there is a future there is time for mending- Time to see your troubles coming to an ending.

Life is never hopeless however great your sorrow- If you're looking forward to a new tomorrow.

If there is time for wishing then there is time for hoping- When through doubt and darkness you are blindly groping.

Though the heart be heavy and hurt you may be feeling- If there is time for praying there is time for healing.

So if through your window there is a new day breaking- Thank God for the promise, though mind and soul be aching,

If with harvest over there is grain enough for gleaning- There is a new tomorrow and life still has meaning.

Ms. Eva Patel, Sr. Lecturer, CSE Deptt.



INTERESTING FACTS

- The first known transfusion of blood was performed as early as 1667,
- when Jean-Baptiste, transfused two pints of blood from a sheep to a young man.
- Fingernails grow nearly 4 times faster than toenails!
- Most dust particles in your house are made from dead skin!
- The present population of 5 billion plus people of the world is predicted to become 15 billion by 2080.
- Women blink nearly twice as much as men.
- Adolf Hitler was a vegetarian, and had only ONE testicle.
- The elephant is the only mammal that can't jump!
- One quarter of the bones in your body, are in your feet!.

EMERGING TRENDS OF CIVIL ENGINEERING

"Civil engineer play a major role in the infrastructure development of a country. All structures constructed in the past exhibit the path of civilization and current infrastructure development express the practice followed by civil engineers." In developing country like India ,government is taking the serious steps for the development of the infrastructure and that ultimately increases the involvement of the civil engineers in shaping the new India. There is continuously research programme is going on for updating the technology for better management of construction process and materials with best adopted technology. Areas of research in civil engineering like remote sensing and surveying, computer application in civil engineering , structural engineering etc. Continuously increasing technology shifted the traditional civil engineering process to the modern way, For example, more stress is now on construction of energy saving buildings and the use of satellites for surveying methods. NANO TECHNOLOGY added the new dimensions to the various emerging trends of the civil engineering for the infrastructure development, it facilitated the civil engineers to determine the quality of the concrete during placement . In future NANOTECHNOLOGY may be used to fill the cracks in concrete. Improving Equipments reduces the involvement of humans in the risk prone area. Now a days the use of softwares increases to such extent in every area of civil engineering that a new tag of " I.T ENABLED CIVIL ENGINEERS " sounds appropriate .Civil engineering work not only responsible for the stability and durability of any structure but it also answerable to lots of life .

Hukum Singh Verma, Lecturer, Civil Deptt.



WIT AND HUMOUR

The world's first fully computerized airliner was ready for its maiden flight without pilots or crew. The plane taxied to the loading area automatically, its doors opened automatically, the steps came out automatically. The passengers boarded the plane and took their seats.

The steps retreated automatically, the doors closed, and the airplane taxied toward the runway.

"Good afternoon, ladies and gentleman," a voice intoned as the airplane lifted off. "Welcome to the debut of the world's first fully computerized airliner. Everything on this aircraft is run electronically. Just sit back and relax. Nothing can go wrong.....nothing can go wrong.....nothing can go wrong....."

Words to Ponder : " **Success is the sum of small efforts, repeated day in and day out.** "

CHAIRMAN'S NEW YEAR MESSAGE



New is the year, new are the hopes and the aspirations, new is the resolution, new are the spirits May The Year 2010 Bring for You Happiness, Success and filled with Peace, Hope & Togetherness of your Family & Friends. Wishing You a *HAPPY NEW YEAR*

Mr. Ajay Prakash Verma, Chairman

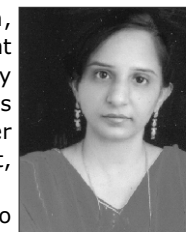
INFORMATION TECHNOLOGY GROWTH AND JOB ASPECTS

Information Technology is the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. IT deals with the use of electronic computers and computer software to convert, store, protect process, transmit, and securely retrieve information.

Today, the term Information Technology has ballooned to encompass many aspects of computing and technology, and the term is more recognizable than ever before. The Information Technology umbrella can be quite large, covering many fields. IT professionals perform a variety of duties that range from installing applications to designing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as the management and administration of entire systems. When computer and communications technologies are combined, the result is information technology, or "infotech". Information Technology (IT) is a general term that describes any technology that helps to produce, manipulate, store, communicate or disseminate information.

These are the some of the field on which IT has grown rapidly like Software Application Design & Development, Custom application design, Database Maintenance, Testing, Web Design, Business Intelligence and data warehousing. The Indian information technology industry has played a key role in putting India on the global map. India is now a power to reckon with due to the IT industry. India's IT growth in the world is primarily dominated by IT software and services such as Custom Application Development and Maintenance (CADM), System Integration, IT Consulting, Application Management, Infrastructure Management Services, Software testing, Service-oriented architecture and Web services. It is believed that the information technology can surely contribute all the fields, such as the Internet that is now dynamically changing our life style and social consciousness will provide us the best tool for the information sharing and mutual communication. Thus, the importance of the studies on Information Technology is undoubtedly increasing.

Sonika Arora, HOD, IT Deptt.



CAMPUS PLACEMENT

Indian Army visited CSIT, Durg on 4th Nov 2009 for an Open Campus Interview under 19th University Entry Scheme for final year (boys and girls) and pre final year (only boys) students of all branches. 8 students cracked the initial screening process and were selected for SSB. The students selected after the SSB they will join as Lieutenant.

List of selected students:

2010 Batch: Peri Sree Prabha and Jaya Rawat (ETC), Pranab Chanda (EI), Vikas Kumar (CSE)

2011 Batch: Jaidev Bhattacharjee (ETC), Md. Ajaz Ahmed, Md. Altamash (Mech)

Editor : **Mr. Rajesh Kumar Ph. : 0788-2320884 (Ext. 140)**

E-TAP : TECHNOLOGICAL EDUCATION AWARENESS PROGRAMME

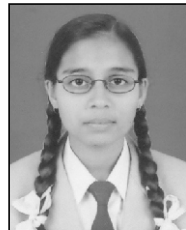
Chhatrapati Shivaji Institute of Technology have organized a Technological Education Awareness Program from Nov. 9 to 14 ,2009. The Program aimed to introduce school students to the various fields of engineering. It mean to introduce students to a wide range of engineering related career options. About 3000 students acquired information about various engineering branches, job opportunities and the factories providing these jobs. The program drawn the students from surrounding schools of Bhilai, Raipur Durg and Rajnandgaon area. CSIT through e-tap program has given students a new vision for engineering education. Chairman CSIT, Ajay Prakash Verma expressed his thoughts that the endeavors is bound to make solid foundation engineering stream and the next target is to campaign in rural areas. He said that students of today must have a basic



understanding of how technology affects their world and how they exist both within and around technology. Technology literacy is fundamentally important to all the students.

Principal Dr. H.R. Sharma and Dean Academic Col. (Retired) Prof. C.K. Chauhan have congratulated for successful conclusion of e-tap programme and expressed good wishes for the bright future of the students. Prof. Dr. Vivek Chandra, Mrs. Archana Tiwari, Ms. Sonika Arora, Mr. Rajesh Kumar, Mr. Santosh Kumar Sharma, Mr. H.R. Chandrakar, Mr. O.P. Yadav, Mr. Anand Prasad Kumbhare, Mrs. Yojana Yadav, Mr. Ajay Pandey, Mr. G.S. Vij, Mrs. Tripti Sahu, Neeraj Gupta, Ms. Neelam Dewangan, Ms. K-Sunita and Mr. Abhisek Jha briefed about different branches of engineering. Prof. Mrs. Sipi Dubey HOD, CSE, Mr. Mangal Singh, HOD, ETC, Mr. Sanjay Ku. Singh, Reader, MECH & TPO took about 4 months to chalk out the program. Principal's of different schools expressed their views to organized such programme from time to time so that the students get more and latest information on technical education.

ARTIFICIAL NEURAL NETWORK



An artificial neural network (ANN) is a flexible mathematical structure which is capable of identifying complex nonlinear relationships between input and output data sets. ANN models have been found useful and efficient, particularly in problems for which the characteristics of the processes are difficult to describe using physical equations. This study presents a new procedure (entitled linear least squares simplex, or LLSSIM) for identifying the structure and parameters of

three-layer feed forward ANN models and demonstrates the potential of such models for simulating the nonlinear hydrologic behavior of watersheds. The nonlinear ANN model approach is shown to provide a better representation of the rainfall-runoff relationship of the medium-size Leaf River basin near Collins, Mississippi, than the linear ARMAX (autoregressive moving average with exogenous inputs) time series approach or the conceptual SAC-SMA (Sacramento soil moisture accounting) model. Because the ANN approach presented here does not provide models that have physically realistic components and parameters, it is by no means a substitute for conceptual watershed modeling. However, the ANN approach does provide a viable and effective alternative to the ARMAX time series approach for developing input-output simulation and forecasting models in various situations.

Heena Parveen, V Sem., E & I

SUCCESS MANTRA TEN ATTRIBUTES THAT WILL GET YOU A JOB



If you thought that just by choosing the right professional course, you will land yourself with a plum job you might be in for a rude shock when you hit the job market. Employers look at attributes beyond just your degree. Every manager

wants an employee who can produce good results for the organization! So we need to understand what attributes managers look for in order to determine whether a candidate will produce results or not. Job descriptions are a basic definition of the knowledge, skills and attitude that are required for a given role. A candidate who scores high on these three attributes is a dream employee for that job. Let us try to understand the knowledge skills and attitude in more detail.

1. Knowledge

Knowledge can be considered as the underpinning principles of a process or procedure, as well as tacit knowledge gained as a result of the experience of performing certain tasks.

If you are applying for a particular role, you must possess the necessary knowledge so that you can perform that role. Let's assume that there is a job for the role of Software Testing Professional. In context of this role, the candidate is required to have the knowledge of software development lifecycle, various testing tools, the process of testing that involves writing test cases, filing defects etc. Knowledge is very specific to a role. While our education system imparts knowledge on various technical/non-technical areas, it often falls short of meeting the expectations of the industry. The biggest gap is the practical application and knowledge of industry practices related to the requirements of a particular role. In good times, most organizations took the responsibility of filling this gap by having an extensive 12 to 16 week training program for fresh employees.

However, in these times, most companies expect the candidates to have this knowledge and hence the interviewers ask lot of questions pertaining to the knowledge requirement of that role. So, number 1 in the list of top 10 is domain knowledge specific to the job.

2. Skills

Skills help you do things effectively. While different

jobs may require varying degree of competence in each of these skills, it will be safe to say that most jobs require the following skills. We can broadly list the skills under the following areas:

Communications skills

(listening, reading, verbal, written) Excellent communication skills are the number one thing that employers and interviewers look for in a candidate. These can be either verbal or written communication skills but you must be able to prove that you can communicate and work alongside others in an excellent manner.

Successful communication is critical in business.

Problem Solving Skills

Companies are looking for people who can fix problems with minimal direction. They don't want to have to tell people to react when fires are burning - the employee should know how to fix the problem. Problem solving includes the following steps:

·The ability to assess a situation, gather more information if necessary

·Identify key issues that need to be addressed

·Break down complex problems into simpler manageable problems

Analyse a problem to develop workable solutions

3. Learn ability

In these dynamic times, as much as half of the information in some industries becomes obsolete in five years. Learn ability is the key skill that makes you constantly learn, unlearn and relearn. This also includes your ability to apply knowledge and skills in new settings. Number 2,3,4 in the top 10 are skills -- communication skills, problem solving skills and learn ability.

4. Attitude

Some people call it attitude, some call it behavioural trait and others mindset. Call it what you wish, but the bottom-line is, this is the single factor that differentiates successful employees from the rest.

Since it is hard to train people on behavioural traits, organizations do not take any risk if they find a candidate lacking here. Let us figure out what key attributes fall under attitude:

5. Loyalty and integrity

Employers are looking for loyalty at both the team/manager level and overall corporate level. Employers want and need to be able to trust their

employees to work professionally to meet the employer's best interests. Employers do not want to hire people who require close scrutiny or who can't be trusted to represent the company in public.

6. Interpersonal Skills

The ability to relate to your co-workers, inspire others to participate, and mitigate conflict with co-workers is essential given the amount of time spent at work each day.

I was going to use teamwork, but that's been done to death and it's also implicit in some of the other qualities.

However, employers, and managers in particular, really, really like to have people who can get along with their colleagues and who can act maturely and responsibly in difficult circumstances.

7. Strong Work Ethic

I think it goes without saying that employers want workers who will work hard and who are committed to meeting deadlines.

You must be able to prove that you are willing to go beyond the call of duty for your employer and that you are willing to give them 100 per cent commitment to the company and the job.

8. Motivation & Initiative

If you are motivated in a job, you will achieve results despite problems. Managers love individuals who are motivated and take initiatives.

9. Flexibility

Business leaders aren't omniscient and they make mistakes. They also have to react rapidly to changing business conditions. They need people who can change gears and focus quickly and adapt their working hours as required.

Flexibility and adaptability deal with your ability to manage multiple assignments and tasks, set priorities, and adapt to changing conditions and work assignments.

10. Determination & Persistence

This is extremely important. Managers will give employees challenging goals, but generally they are achievable. The key is to be able to work hard and keep moving things forward when you encounter obstacles.

A good employee is an asset to any organisation and worth the weight in gold. If you have your KSA in place, you are on your way to corporate success!

Lokesh Verma, Manager(HR)

Know Your Faculty

Name : **Mrs. Padmini Sharma**
 Designation : Reader, EEE Deptt.
 Qualification : M.Tech (Instrumentation & Control)
 Year of Completion : 2008
 With CSIT since : 28th August, 2004
 Subject of Interest : Electrical Circuits, Network Analysis, Electrical Machine & Power System.

Achievements : Passed GATE Exam in 2004 with 92 percent.
 Hobbies : Listening to music
 I Like : People who are friendly and honest to others.
 I Hate : Fake faces.
 Motto of my life : Evaluate yours strength & build on them.
 Message : Ability can take you to the top, but it takes character to keep you there.
 Strength : My self & my family.



Name : **Dr. (Mrs.) Suman Singh**
 Designation : Assistant Professor (Engg. Mathematics)
 Qualification : M.Sc, Ph.D.
 Year of Completion : 2001
 With CSIT since : 01 April 2004
 Subject of Interest : Abstract Algebra, Integral Equations,

Achievements : Yet to come
 Hobbies : Learning New things, Reading
 I Like : Straight forward people, Simplicity.
 I Hate : Selfishness, Liars
 Motto of my Life : Try not to be a person of success but rather try to be a person of values.
 Message : Something is not good enough to do your best you have to do what is required.
 Strengths : Determination, Hard work.



Name : **Mrs. Urmila S. Soni**
 Designation : Sr. Lecturer (E & I Deptt.)
 Qualification : B.E. (E&TC), M. Tech (Instrumentation) Pursuing.
 Year of Completion : 1996
 With CSIT Since : 2005
 Subject of Interest : Analog Circuits, Linear Integrated Circuit, Industrial Instrumentation.

Achievements : M.Tech topper.
 Hobbies : Reading, Traveling, Music and Cooking.
 I Like : Honest and Straight forward people.
 I Hate : Back-bitter, liar and double minded people.
 Motto of my life : To face good & bad conditions with the same spirit in life.
 Message : Whatever we wish, we cannot achieve, whatever we achieve we couldn't wish, but we have to tackle all those things, this is the parody of human being.
 Strengths : Hard-working positive thinking, will power and my family.



Name : **Raj Kumar Sahu**
 Designation : Reader, E & TC
 Qualification : B.E. (ECE), M.Tech (D.E.)
 Year of Completion : 2009
 With CSIT since : 15 May 2006
 Subject of Interest : Signal & System, ACS, Analog Electronics

Achievements : Yet to achieve
 Hobbies : Reading, Traveling, Listening Music.
 I Like : Straight forwardness.
 I Hate : Selfish people
 Motto of my life : To be a successful human being.
 Message : Give your best and success will automatically come.
 Strength : My mother.



CLICK 'N' SURF

www.vyoms.com
 static.placementpapers.net
 www.123eng.com
 www.noisemakers.org.uk

www.helpingnotes.com
 www.varsitynotes.com
 www.techbirbal.com
 www.students.engr.ncsu.edu

FORTH COMING EVENTS

Megalith'10, Department of Civil Engineering, IIT Kharagpur, West Bengal, **January 15 to 17, 2010** For details - www.megalith.co.in

"Robolution"-RoboticsEvents, 15Jan-18Jan2010, BIT Mesra For details: (<http://robolution.org/events.html>)

Kurukshetra 2010, Techno Management Fest, Anna University, Chennai on **20 Jan - 23 Jan**. For details: Website: www.kurukshetra.org.in

Techfest 2010, 22nd - 24th Jan 2010, IIT Bombay, Powai, Mumbai, For details: [http://techfest.org/](http://techfest.orghttp://techfest.org/)

Kshitij-2010, Annual Techno Management Feast, IIT-kharagpur, **28th-31Jan, 2010**. For details: www.ktj.in

Gnosiomania 2010, MNNIT Allahabad on **29 January -31 January**. Website: www.gnosiomania.mnnit.ac.in. For details: gnosiomania2010@gmail.com

"Sparx 2010", on **Feb 12-14, 2010**, Indian School of Mines -Dhanbad ,For details: <http://www.sparx.org.in>

International Conference on "Control, Communication and Computing" (ICCC 2010), College of Engineering Trivandrum on **18-20 Feb 2010**, Thiruvananthapuram, Email: iccc2010@ece.cet.ac.in Fax: +91 4712598370 Tel: +91 4712515639 / 653/ 566, +919349008093, +919387808905, +919447109892

International Conference on "Integrated Intelligent computing (IICIC - 2010)", SJB Institute of Technology, Kangeri, Bangluru, India. For details. Conference at dline.info.

ATTITUDE IS EVERYTHING

The process of human change begins within us. We all have tremendous potential. We all desire good results from our efforts. But, one thing that determines the level of our potential and that predicts the quality of the result we receive is our ATTITUDE. No one can exercise authority over our attitude unless we voluntarily choose to let them do so. Our beliefs, judgements and values are all directed by our attitude. Our behaviour is the image created on our attitude.

If each letter in English alphabet is number from 1 to 26, Then the following comes out to be :

S	K	I	L	L	S					
+	+	+	+	+	+					
19	11	09	12	12	19					= 82
K	N	O	W	L	E	D	G	E		
+	+	+	+	+	+	+	+	+		= 96
11	14	15	23	12	5	4	7	5		
H	A	R	D	W	O	R	K			
+	+	+	+	+	+	+	+			= 98
8	1	18	4	23	15	18	11			
A	T	T	I	T	U	D	E			
+	+	+	+	+	+	+	+			= 100
1	20	20	9	20	21	4	5			

So, human attitude determines every single bit of success and failure. There are many things in this world which we don't like but, at times we can't change them, at that moment we require to change our attitude and a change in that would solve all the problems. A positive attitude shows the brighter side of life, leads to happiness and success and can change our whole life. If we want to receive the rewards, the future holds in stock for us, then we must maintain total command over our attitude. Our attitude is an asset, a treasure of great value and it is to be projected from external factors who would injure our positive attitude and seek to influence it otherwise. "Just like a great building stands on a strong foundation, so does success and the foundation of success is attitude."

Ankush Pillai, II Sem. ETC (B)

THE JAPANESE MASTER

A great Japanese Master received a university professor who came to enquire about wisdom. The master served tea. He poured his visitor's cup full, and then kept on pouring. The professor watched the overflow until he could no longer restrain himself. 'It is overfull. No more will go in!' 'Like this cup,' the master said, 'you are full of your own opinions and speculation. How can I show you wisdom unless you first empty your cup?'

Ms. Rajeshri Lanjewar, Lect. CSE Deptt.

GOLDEN WORDS

Three sentences of getting Success : 1. Know More than others.
 2. work more than others.
 3. Expect less than others.

MEASUREMENTS NEED HELP TO ENTER THE CYBER WORLD



PC-based data acquisition (DAQ) systems and plug-in devices work in a very wide range of applications on the manufacturing plant floor. Typically, DAQ plug-in devices are general-purpose instruments well suited for measuring voltage signals. However, most real-

world sensors and transducers generate signals a user must condition before a DAQ device can reliably and accurately acquire the signal. This front-end processing call it signal conditioning includes functions such as signal amplification, filtering, electrical isolation, and multiplexing. Transducers are devices that convert physical phenomena, such as temperature, strain, pressure, or light, into electrical properties, such as voltage or resistance. All produce some kind of electrical signal that varies as temperature, pressure, or whatever parameter. That signal needs work, it needs some massaging, and that is "signal conditioning." Take a thermocouple for example. Although the thermocouple is inexpensive, rugged, and can operate over a very wide range of temperatures, the thermocouple has some unique signal

conditioning requirements. A thermocouple operates on the principle that the junction of two dissimilar metals generates a voltage that varies with temperature. However, connecting the thermocouple wire to the wire that connects it to the measurement device creates an additional thermoelectric junction, referred to as the cold junction. The actual measured voltage includes both the thermocouple voltage and the cold-junction voltages. The method of compensating for these unwanted cold-junction voltages is cold-junction compensation. Software can then compute the appropriate compensation for the unwanted thermoelectric voltages. Sensitivity and noise are also important measurement issues with thermocouples. Thermocouple outputs are very low in level and change only 7 to 50 mV for every 1°C change in temperature, making the signals susceptible to the effects of electrical noise. Therefore, thermocouple conditioners include low-pass noise filters for suppressing 50 and 60 Hz noise and high-gain instrumentation amplifiers to boost the level of the signal. Amplifying the thermocouple signal also increases the resolution, or sensitivity, of the measurement. In addition to handling specific transducers like this thermocouple example, signal conditioners perform a variety of general-

purpose conditioning functions to improve the quality, flexibility, and reliability of a measurement system. There is signal amplification, filtering, isolation, multiplexing, and other more esoteric functions. Signal amplification is necessary because real-world signals are often very small in magnitude. Signal conditioning can improve the accuracy of the data. Amplifiers boost the level of the input signal to better match the range of the analog-to-digital converter, thus increasing the resolution and sensitivity of the measurement. Filtering rejects unwanted noise within a certain frequency range. Almost all DAQ applications are subject to some degree of 50 or 60 Hz noise picked up from power lines or machinery. Most conditioners include low pass filters to reject 50 or 60 Hz noise.

Isolation removes common-mode voltage errors, typically caused by differences in ground potentials that arise from improper grounding of a system. Poor grounding causes measurement problems, noise, and damaged DAQ devices. Multiplexing is the transmission of several messages simultaneously on the same circuit or channel. Signal conditioners with multiplexing can economically expand the capacity of the DAQ device to handle large numbers of channels.

Chetan Pathak, VI th Sem, EI

Know Your Office/Lab Staff

Name : **Vijay Kumar Hiradhar**
 Designation : Teaching Assistant
 Qualification : ITI (Air. Con.), PGDCA, MA, M.Lib
 Year of Completion : 2008
 With CSIT Since : 2002
 Hobbies : Music & Games
 I Like : Honesty, Simplicity
 I Hate : Back biting
 Motto of my Life : To be a good Person & try to be honest with others
 Message : Believe in hard work and smart thinking.
 Strengths : My friends & family.



Name : **Mr. Hemraj Sahu**
 Designation : Sr. Lab Instructor
 Qualification : Diploma in Electrical Engg., BA
 Year of Completion : 2002
 With CSIT since : July 2006
 Hobbies : Traveling, Cricket, making New friends
 I Like : To exchange new thoughts with friends.
 I Hate : Dirty Politics.
 Motto of my life : To provide good education to my child.
 Message : Honesty and sincerity about any work. Give always the best results.
 Strengths : My Family.



Name : **Manor Kumar Jena**
 Designation : Instructor
 Qualification : B.Sc. (Maths), D.C.P.S.M., PGDCA
 Year of Passing : 2008
 With CSIT since : 10th Sept. 2007
 Hobbies : Reading Books
 I Like : Honesty
 I Hate : Liars, Back-Biters
 Motto of Life : To achieve an Excellent Position in life.
 Message : Be honest and dedicated to your work.
 Strength : My Family & Friends.



Name : **Mrs. Rajni Katakwar**
 Designation : Technical Assist. (Elec.)
 Qualification : B.A., I.T.I. (Elec.), PGDCA, Diploma in Audio, Radio Servicing, LEVS, Skill Competition in Electronics.
 Year of Passing : 2008
 With CSIT since : 7th Oct. 2003
 Hobbies : Listening to Music, Cooking.
 I Like : Sincerity, & Simplicity.
 I Hate : Selfish People.
 Motto of Life : To help others to the best of capacity and to make others happy.
 Message : Be honest and dedicated to your work.
 Strength : My family, Self Confidence.



A LITTLE BOY

This is from an old story, back in the '30s, in the days when an ice cream sundae cost much less. A 10 year-old boy entered a hotel coffee shop and sat at a table. A waitress put a glass of water in front of him.

"How much is an ice cream sundae?" the little boy asked.
 "Fifty cents," replied the waitress.

The little boy pulled his hand out of his pocket and studied the coins he had. "Well, how much is a plain dish of ice cream?" he inquired.

By now, more people were waiting for a table and the waitress was growing very impatient. "Thirty-five cents," she brusquely replied.

The little boy again counted his coins. "I'll have the plain ice cream," he said. The waitress brought the ice cream, put the bill on the table and walked away. The boy finished the ice cream, paid the cashier and left. When the waitress came back, she began to cry. As she wiped down the table, there placed neatly beside the empty dish were two nickels and five pennies. You see, he couldn't have the sundae because he had to have enough money to leave her a tip.

Manjusha Bhale, Lecturer, CSE Deptt.



INCENTIVES/REWARDS

Acceptance of Paper in Journal :

Paper titled "Spatial and temporal variation of mercury load in surface water and sediments around an integrated steel plant in India" authored by Dr. Yasmeen F. Parvez & HOD Chemistry Deptt. has been selected to be published in "the environmentalists" 2009 the International journal of USA.

Faculty :

1. Mrs. Pratibha S. Kurup and Mr. Shailendra Kumar Kushwaha Lecturer deptt. Of Chemistry attended a National Workshop on " New Trends & Techniques in Environmental protection" held at Rungta College of Engineering, Bhilai on 11-12 December 2009.

2. K. Ganpati Shrinivas Sharma, Lecturer E & I Depratment attended a National Conference on "Synthesis Material Characterization in Application" and presented a paper titled "Oxygen Analyzing and Monitoring using Zirconia Material" held at DMAT Raipur on 14th - 16th December 09.

TIPS TO IMPROVE THE WAY YOU SPEAK ENGLISH

Many deserving candidates lose out on job opportunities because of their vernacular accent.

All you need to do is train yourself to speak English as comfortably and perfectly as you speak your mother tongue.

This is the first step to learn any other accent, be it American or British or Australian.

I. Observe the mouth movements of those who speak English well and try to imitate them.

When you are watching television, observe the mouth movements of the speakers.

II. Until you learn the correct intonation and rhythm of English, slow your speech down. If you speak too quickly, and with the wrong intonation and rhythm, native speakers will have a hard time understanding you.

III. Use the dictionary.

IV. Make a list of frequently used words that you find difficult to pronounce .

V. Pronounce the ending of each word : Pay special attention to 'S' and 'ED' endings. This will help you strengthen the mouth muscles that you use when you speak English.

VI. Read aloud in English for 15-20 minutes every day. Research has shown it takes about three months of daily practice to develop strong mouth muscles for speaking a new language.

VII. Record your own voice and listen for pronunciation mistakes.

Ms. Tulika Verma, Lecturer, CS Deptt.



HOSPITAL WINDOW

Two men, both seriously ill, occupied the same hospital room. One man was allowed to sit up in his bed for an hour each afternoon to help drain the fluid from his lungs. His bed was next to the room's only window. The other man had to spend all his time flat on his back. The men talked for hours on end. They spoke of their wives and families, their homes, their jobs, their involvement in the military service, where they had been on vacation. Every afternoon when the man in the bed by the window could sit up, he would pass the time by describing to his roommate all the things he could see outside the window. The man in the other bed began to live for those one hour periods where his world would be broadened and enlivened by all the activity and color of the world outside. The window overlooked a park with a lovely lake. Ducks and swans played on the water while children sailed their model boats. Young lovers walked arm in arm amidst flowers of every color and a fine view of the city skyline could be seen in the distances the man by the window described all this in exquisite detail, the man on the other side of the room would close his eyes and imagine the picturesque scene. One warm afternoon the man by the window described a parade passing by. Although the other man couldn't hear the band he could see it. In his mind's eye as the gentleman by the window portrayed it with descriptive words. Days and weeks passed. One morning, the day nurse arrived to bring water for their baths only to find the lifeless body of the man by the window, who had died peacefully in his sleep. She was saddened and called the hospital attendants to take the body away. As soon as it seemed appropriate, the other man asked if he could be moved next to the window. The nurse was happy to make the switch, and after making sure he was comfortable, she left him alone. Slowly, painfully, he propped himself up on one elbow to take his first look at the real world outside. He strained to slowly turn to look out the window beside the bed. It faced a blank wall. The man asked the nurse what could have compelled his deceased roommate who had described such wonderful things outside this window. The nurse responded that the man was blind and could not even see the wall. She said, "Perhaps he just wanted to encourage you."



Priyank Shrivastava, Lect., Mech. Deptt.

"THE PRINCIPLE OF BUOYANCY"

This Short Story Eureka Eureka is quite interesting to all the people. Enjoy reading this story. Archimedes was a Greek scientist. He lives in Syracuse nearly 200 years ago. The King of the land wanted to wear a Golden Crown. He gave some gold to a goldsmith to make a suitable crown. After few days, the goldsmith brought the finished crown to the King. The crown was weighed. The weight of the crown was equal to the gold given to the goldsmith by the King. The King looked at the color of the crown. He had a suspicion. The goldsmith could have stolen some gold from the gold given to him. The King wanted to find out the truth. He asked his court scientist Archimedes to find out. The King said, "Find out how much gold had been stolen?" How to find out the truth? Archimedes thought about the problem day and night. One day he was about to have his bath, but he was busy thinking. He did not notice the bathtub. The water in the bathtub was already full to the brim. He slid into the bathtub. Immediately a large quantity of water flowed over the brim of the bath tub. He noticed this suddenly. His brain wave worked suddenly. He jumped out of the bathtub, shouting, "Eureka! Eureka!" Eureka in Greek means "I have found it." Different metals of the same weight have different volumes. Objects, put in water, will displace water. The displaced water will be equal to their volume. For example, an iron cube weighing a kilogram will disperse some water. But an aluminum cube of the same weight will displace more water than the iron cube. Archimedes knew all these theories. Using this as the basic knowledge, Archimedes worked out a plan to find out the purity of the crown. Archimedes took two bowls. He filled them with water to the brim. Then he placed each bowl separately in the middle of the large vessels. He placed the crown in one bowl. Water overflowed. It collected at the bottom of the outer vessel. Then he took a cube of pure gold. This cube of gold was equal in weight to the crown. He kept this gold cube in the middle of the second bowl. Here also water overflowed. Water got collected at the bottom of the outer bowl. Archimedes then measured the quantity of water in the two vessels. He found out the difference in the water overflow. The crown had sent out more water. The cube of gold had sent out less water. But both the crown and the gold cube were of the same weight. So, they should have sent out the same quantity of water. Therefore, the crown had some other metals mixed in it. These metals took up more space in the water than pure gold. Archimedes reported this finding to the King. The King demanded the truth from the goldsmith. The goldsmith then confessed. He had stolen some gold. He had added some other metals.

Naman Padhiar, I Sem, ETC

HARD WORK DOES NOT KILL ANYBODY

There was a lazy boy who loved to get up late and go to bed early. During the day, he did everything to avoid work. He would hide behind a door or sleep behind a tree as in the garden when his mother called him to go to the market and fetch vegetable. She was thoroughly disgusted with him. What do do with such a boy she often wondered. This father owned a shop where he work very hard. He wanted his son to help him and he often told him that does not kill any body. But this lazy boy did not do anything, neither did he study. He went to school but did not learn anything and he was bored all the time. One day however, as he sat on bench in garden he saw a live of ants he watched those ants come and go in a hurry. " they are collecting food for the raining season when they would be confined to be their ant hill. They are storing food for the winter". His mother said, but then don't they get tired? he asked No my son, when you work hard, you enjoy you fell great, she replied.

The was a good day for the boy . That back from the school, he helped his father at work and mother in the kitchen and when he went to bed at night he was happy that he helped his parent s at works. He slept happily, looking forward for next day of work and study and lots of playing

"Thus Ants changed the day attitude."

Vineeta Verma, III Sem., EEE

SALMONELLA HAS SWEET TOOTH

Salmonella has been responsible for many cases of food poisoning the world over and is the bacteria responsible for the recent peanut butter, tomato and other food stuffs that were making headlines. Contamination of foodstuff with this nasty bacterium results in extreme diarrhea, vomiting and more serious effects, with death possible for those with weak immune systems. Researchers in the UK have identified a possible weak point by which to attack

the deadly bacteria, its sweet tooth. As it turns out, the bacteria feed on the sugar glucose as it infects its host using it to fuel its nasty abilities. Using this weakness, it would be possible to spike the glucose with something that can kill the bacterium and eventually a treatment system that would eliminate the threat from this nasty bugs that though considered to be not that lethal, kills millions the world over each and every year.



Biroja Panda, IV Sem., IT

DIGITAL MIRROR QB1 COMPUTER

QB1 has a screen, but lacks physical interference such as a keyboard or mouse. The screen is monitor on a motorized robotic "neck" that this its monitor to face any one near by like one person seeking eye contact with another. To interact with QB1, user can only use hand and arm gestures which are detected by a motion sensing camera built into the screen. This gestures then appear on the screen, which act like a digital mirror so a user can see what their input is achieving. The screen also houses a number of EDS the illuminates the room with infrared light used by camera to perceive depth and gain a rough 3D picture of its surrounding That allow the computer to vary the size of text or other information on the screen to suit the distance of the user.

Shashank Dekate, III Sem, ETC 'B'



CHANGE YOUR MIND CHANGE YOUR LIFE

The first thing you will need to change is your beliefs about what you can or cannot accomplish. I'm not only talking about money here. I'm talking about anything and everything that is important to you.. If you want a successful career, then you must first believe that it's within your reach. Belief is a powerful thing, so powerful that if you believe you were meant to live a mediocre life, then that fate will be set in stone, at least in your mind. A belief is simply a feeling of certainty. When you believe something, you are certain that it is true. When you don't believe something, you are certain that it's not true or you're uncertain that it's true. Understanding this will help you see realize that whether you think something is possible or impossible doesn't necessarily depend on reality. It all depends on what you perceive as reality. There was story about a bright student who took an intelligence test. Upon seeing his score, he was shocked to find out how low his score was. This caused him to believe that he was not a bright student and that he was incapable of doing well in school even though he has always been an A student. After this teacher saw a huge drop in his grades, he had a talk with him to see what was going on. It turned out, the student misinterpreted the score. Not only did he actually have a high score, it was one of the highest scores in the nation. Upon learning this, his grades immediate shot back up again. The point of the story is to show you how powerful a belief can be. You can either use it to destroy your life or use it to propel yourself to new heights.

Mrs. Tripti Sharma, Sr. Lecturer CSE Deptt.



IRONIES OF LIFE

There was a lazy boy who loved to get up late and go to bed early. During the day, he did everything to avoid work. He would hide behind a door or sleep behind a tree as in the garden when his mother called him to go to the market and fetch vegetable. She was thoroughly disgusted with him. What do do with such a boy she often wondered. This father owned a shop where he work very hard. He wanted his son to help him and he often told him that does not kill any body. But this lazy boy did not do anything, neither did he study. He went to school but did not learn anything and he was bored all the time.

One day however, as he sat on bench in gardThe professor began his class by holding up a glass with some water in it. He held it up for all to see; asked the students, ' How much do you think this glass weighs?' '50gms!' '100gms!' '125gms!' the students answered. 'I really don't know unless I weigh it,' said the professor, 'but, my question is: What would happen if I held it up like this for a few minutes?' 'Nothing' the students said. 'Ok what would happen if I held it up like this for an hour?' the professor asked. 'Your arm would begin to ache' said one of the students.

'You're right, now what would happen if I held it for a day?' 'Your arm could go numb, you might have severe muscle tress; paralysis; Have to go to hospital for sure!' ventured another student; all the students laughed. 'Very good. But during all this, did the weight of the glass change? No' the student said. Then what caused the arm ache & the muscle stress?' The students were puzzled.

"What should I do then?" asked the Professor. 'Put the glass down!' said one of the students. 'Exactly!' said the professor.

Life's problems are something like this. Hold them for a few minutes in your head; they seem OK. Think of them for a long time & they begin to ache.

Hold it even longer & they begin to paralyze you. You will not be able to do anything. It's important to think of the challenges (problems) in your life, but it is EVEN MORE IMPORTANT to 'put them down' at the end of every day before you go to sleep. That way, you are not stressed, you wake up every day fresh & strong & can handle any issue, any challenge that comes your way.

Manju Vishwakarma, Lecturer & Astd. TPO

HAPPENINGS OF THE MONTH

Institutional

1. CSIT organized a workshop on "Stress Management for Professionals" on 1st December 2009. The workshop was conducted for the faculties'. A renowned psychiatrist Dr. Pramod Gupta taught the tact of handling the situation. He said teachers are light house of the society and future shapers. They should not take workload beyond capacity, recognize self and to be cheerful always. To avoid stress Dr.Gupta suggested nutritive diet ,physical activities like walking ,yoga ,meditation,pranayam and surysnamaskar to be included in daily routine.Principal Dr.H.R Sharma,Dean Col.C.K.Chauhan (retired),R.A Mishra, N.H Kela, S.R paul, santosh ku. Sharma, Prof.T.D Jaigopal,Prof. Mangal Singh ,Mrs. Sipi Dubey, Mr. G.S.Vij ,Dr. Vivek Chandra, Dr.Renu Tripathi, Pratibha Kurup, Registrar Rajesh Verma were present in the workshop.

2. A State Level Model Competition on Renewable energy / Energy conservation for higher secondary students was organized by Renewable Energy Club at CSIT on 3rd Dec. 2009. The purpose was to propagate & promote use of renewable energy amongst students. The event was sponsored by CREDA. This exhibition was inaugurated by Dr. H. R. Sharma, Principal CSIT Durg. About 100 students from 10 higher secondary schools from Durg & Bhilai participated in this model competition. The models were based on use of solar energy, wind energy, economical generation of electricity, and electricity generation by cow urine. The prizes and certificates were distributed amongst participants by the Chief Guest. Colonel Ravindra Verma The judges for this competition were Prof. S.R. Paul, Prof. B.L. Sharma from C.S.V.T.U. Bhilai and Engineer Shri A.N. Singh from CREDA. Following were declared winners by the judges panel.



First prize: Vishwadeep Senior Secondary School Durg.Topic: Solar vehicle
Second prize: Yugchetna Public School ,Bhilai.Topic: Economical cost effecting thermal Boiler

Third prize: Maitri Vidya Niketan Senior Secondary school, Risali.Topic: low cost solar cooler.

10 consolation prizes were also awarded. competition was organized by the sincere effort of Prof. N.H. Kela, Prof. R.A. Mishra, Mr. Kamta Prasad Nagendra, Mr. Prabhas Gupta, Mr. Rajkumar Sahu and Mr. Vidya Sagar Dewangan.

Associational

BRITE organized Painting Competition "MIRAGE" on 3rd Oct 09'. This creative and artful event was judged by Mr. Mangal Singh ,HOD, ET&C. 60 students registered themselves for the competition & finally 35 students were present on the day to show their zeal .Col. C.K . Chouhan, Dean Academics, Ms.



Sonika Arora ,HOD I.T Deptt. & Mr. Sanjay Singh have also graced the function and showered their blessings. Mr. Mohnish Mahobia ,Association Incharge & Ms. Pallawi Sao have supported the event very well.At last Mr. Mangal Singh the judge of the whole event declared the result of the competition, which is as following:-1st - Durgesh Soni EEE(3rd sem) , 2nd - Rahul Rathi MECH (1st sem 'B'), 3rd - Md. Zahiruddin Ansari MECH (3rd sem 'A'), 4th -Purva Sharma IT(1st sem ,) 5th - Abhishek Dewangan EEE (3rd sem 'A'). The amount of 500/- was given to 1st winner, 200/- to 1st runner up, & three consolation Prizes were distributed.Definitely,with the great success of this event Information Technology Deptt. is surely looking forward in organizing such kind of challenging & interesting competitions in future.

OCCASION & FESTEVITIES

Guru Gobind Singh Jayanti, 5 January - Celebrated by the Sikhs, the birthday of their tenth and last guru, this day witnesses' large processions and special prayer gatherings at all Gurudwaras.He was inspired to write many powerful spiritual compositions that infused a martial spirit in the people.This included the Jaap Sahib, but He did not include them in the Sikh scripture, the Guru Granth Sahib. His writings have instead been collected in a separate volume, called the Dasam Granth. Upon His passing away, He instructed his Sikhs to regard the Guru Granth Sahib as their teacher. 'Granth' literally means 'volume' (especially, a Holy volume). 'Sahib' is a term of reverence used for anything sacred. The Guru Granth Sahib is the perpetual guru of the Sikhs today.

Makar Sankranti ,14 January - Makar Sankranti is one of the most auspicious occasions for the Hindus, and is celebrated in almost all parts of the country in myriad cultural forms, with great devotion, fervour & gaiety. It is a harvest festival. Makar Sankranti is perhaps the only Indian festival whose date always falls on the same day every year i.e. the 14th of January.To Hindus, the Sun stands for knowledge, spiritual light and wisdom. Makar Sankranti signifies that we should turn away from the darkness of delusion in which we live, and begin to enjoy a new life with bright light within us to shine brighter and brighter. We should gradually begin to grow in purity, wisdom, and knowledge, even as the Sun does from the Day of Makar Sankranti.The festival of Makar Sankranti is highly regarded by the Hindus from North to down South. The day is known by various names and a variety of traditions are witnessed as one explores the festival in different states.

Vasant Panchami / Shree Panchami / Saraswati Puja, 20 Jan - Hinduism is a way of life rather than a religion. The people practicing Hinduism have firm faith on Gods and Goddesses whom they worshipped on various occasions by performing Puja and rituals. Vasant Panchami is a festival that worships Goddess Saraswati as well as it signifies the beginning of Vasant Ritu (spring season).Magh Sud 5 (5th day of the bright fortnight of the lunar month of Magh falls usually in the month of January or February) is the day of Vasant Panchami and is also celebrated as Shree Panchami or Saraswati Puja in West Bengal and few other parts of Orissa.On this day Goddess Saraswati is worshipped in various names and fames - the Goddess of Learning, the deity of Gayatri, the fountain of fine arts and science, and the symbol of supreme vedantic knowledge.The image of Vasant Panchami or Saraswati Puja is celebrated with great enthusiasm and Hindu temples and households are full of activity on this day. This is also a special day for school children as they observe it with great reverence.

Republic Day,26 January - It celebrated on every year, is one of India's most important national events. It was on January 26th, 1950 that the constitution of India came into force and India became a truly Sovereign, Democratic and Republic state.On this day -India finally enjoyed the freedom of spirit, rule of law and fundamental principle of governance. The patriotic fervor of the Indian people on this day brings the whole country together even in her embedded diversity.Republic Day is celebrated most majestically in the capital, New Delhi, where symbols of the great nation's military might and cultural wealth are displayed in what is the world's most impressive parade. All Government buildings are illuminated lending the city the atmosphere of a fairyland. This day is celebrated with much zeal and pride all across the nation.

THE GPS TECHNOLOGY

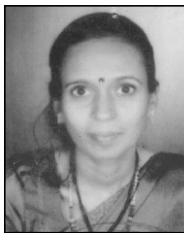
Throughout time people have developed a variety of ways to figure out their position on earth and to navigate from one place to another. Early mariners relied on angular measurements to celestial bodies like sun and stars to calculate their location. The 1920s witnessed the introduction of more advanced technique-radio navigation-based at first on radios that allowed navigators to locate the direction of shore-based transmitters when in range. Later development of artificial satellites made possible the transmission of more precise, line of sight radio navigation signals and sparked a new era in navigation technology. Satellites are first used in position finding in a simple but reliable 2D Navy system called Transit. This laid the groundwork for a system that would later revolutionize navigation for ever-the Global Positioning System The Global Positioning System (GPS) is a satellite based navigation system. The concept of GPS was introduced by the United States Department of Defense (DoD). It is in the year 1994 that the GPS was completely developed. The GPS is developed to provide continuous, highly precise positions, velocity and time information to the land, sea, air and space based users. The intent of system is to use a combination of ground stations, orbiting satellites and special receivers to provide navigation capabilities to virtually everyone, at any time, anywhere in the world, regardless of weather conditions.

Shreshth Gupta, VI Sem., ETC (B)



FOUR STRATEGIES TO RECESSION

While no politician in 2008 dared use the "r-word" to discuss the U.S. economy -- calling it instead a slowdown or period of reduced growth -- we now know officially what we have known all year -- that the U.S. economy is in a recession. However, the one thing that is certain is that the job market has weakened dramatically, with companies in numerous industries announcing or planning layoffs well through 2009.The key is not to panic or make any snap decisions. Unless some major negative (and unforeseen) economic event happens, widespread layoffs are unlikely; in some of the worst economic times, the U.S. has seen single-digit unemployment rates (the highest of 9.7 percent in 1982) -- and only a few points higher than today's 6.5+ percent rate. On the other hand, it is never a mistake to be prepared and proactive about your career -- because no one else will be if you are not.



1. Stay Alert to Grapevine: You need to walk a fine line here, because you want to be alert to insider information about your employer while avoiding getting too caught up in the rumors that often swirl around the water-cooler. And even more importantly, do not be the person identified as spreading any rumors. You'll build your career capital by being perceived as someone who is calm and cool under pressure -- and helps calm others around you.

2. Dust off the Resume: At no time in your career -- except when you're ready to retire -- should your resume not be current. Without question, in times of uncertainty, there is no excuse not to have an up-to-date resume.

3. Focus on Professional Development Opportunities: A hallmark of successful people is that they never stop learning more about their profession/industry/career. Dispensable employees are those who still insist on doing the job as it has always traditionally been done while indispensable employees are on the cutting-edge of their profession.Find conferences that offer seminars in which you can learn new ways to perform your job -- or do it better. Consider additional training, certifications, and degrees. Continuing education is required in certain fields (healthcare, education), but it's truly vital to your professional growth and success as well -- and not just for trying to save this job, but for yourself. At a minimum, read your industry trade journals and books, but do seek out greater educational opportunities as they greatly enhance your career capital.

4. Network, Network, Network: One of the fundamental rules of career development is never stop networking, and never stop growing and expanding your network of contacts. Many folks think that networking is only for when you're actively (or about to be actively) job-hunting, but the truth is once you start networking, you should never stop.Remember, as you talk with people in your network, you're not asking for a job or telling them the latest layoff rumor about your employer. The point of networking is the sharing of information.

Final Thoughts: Following these suggestions and strategies should put you in good standing with your current employer, perhaps even getting you a promotion sooner than expected, and surely giving you a strong foundation in times of economic uncertainty. But these same guidelines will also make you a marketable brand with strong career capital on the job market when that time arrives for you to seek a new employer.

Mrs.Urmila Soni,Sr.Lecturer,E&I Deptt.

ELECTRONICS & TELECOMM AT A GLANCE

Electronics Engineering is constantly changing and widening branch of the engineering profession. Only 50 years ago, the thought of being surrounded by computers, microprocessors, internet, and cell phones was unheard of. This development is due to the electronics engineer works in a team with other specialists to design, fabricate, produce and test complex electronic equipments and components for a number of industries Telecommunication, Healthcare, Computer, Automotive, Defense to name a few.

The subjects like Mobile and Satellite communication, Radio electronics for use in radar, remote measurements and navigation, Fiber-optics communication, study of Microcontrollers and Microprocessors, Digital communication, Control theory, Signal and image processing. This not only provides a strong base to pursue job opportunities in Electronics, Computer and IT industry but also opens door for advanced study in the field of Very Large Scale Integration (VLSI) design, Microwave Engineering, Embedded Systems, Development of Micro-Electro-Mechanical systems(MEMS), Bio-Informatics and Internet applications. Increased demand by government and businesses for communication equipment, computers and military electronics along with consumer demand and increased research and development on robots and other types of automation contributes to the growth of employment opportunities in this field.

Mr. Mangal Singh,HOD,ETC Deptt.



GREATEST MYSTERIES OF WORLD

Bermuda Triangle

An unknown number of ships and aircraft have vanished without a trace here. Situated in the northwestern Atlantic Ocean between the coast of Florida and the islands of Puerto Rico and Bermuda, Bermuda Triangle has claimed everything from charter boats to large surface vessels, from small private airplanes to large commercial airliners, with passengers and crew never heard from again. Many believe that an extraterrestrial influence gives this portion of the ocean menacing power. King Tut's tomb An Egyptian pharaoh of the 18th dynasty - had been untouched for 3,300 years before it was opened. Mystery surrounds the cause of the famous king's death and the unexplained deaths of the many of the researchers who opened the tomb. Many believe it to be the 'Curse of King Tut's which unleashed punishment and death on those who opened the tomb.



MachuPicchu

A Pre-Columbian city in Peru was constructed around 1450, at the height of the Inca Empire, and was abandoned less than 100 years later, as the empire collapsed. Few knew of its existence until 1911, when it was brought to the world's attention. It is said that the silhouette of the mountain range behind Machu Picchu represents the face of the Inca looking upwards, while the largest peak, Huayna Picchu , represents his pierced nose. It is often referred to as "The Lost City of the Incas".

Angel Hair

Angel Hair is a rare phenomenon that has so far defied explanation. It is made up of silken threads that rain down on to the earth, but reach out to touch it and it will almost certainly vanish before your eyes. It is a world wide phenomenon with the most regular occurrences from North America, New Zealand, Australia, and western Europe. There is no known proof for what causes this substance, or even what it is made up of. Speculations are that it has come from Spiders or another type of silk-spinning insect, and even UFO's as it has often been associated with UFO sightings. Because of its sensitive nature, it has been difficult to collect, and to analyse as it is subject to contamination from car exhaust fumes, and even human contact, which could skew the chemical results.

Mrs. Sumita Sen Gupta, Lecturer, Physics Deptt.

WORDS OFTEN CONFUSED

Accept vs. Except

Accept (verb) - to receive

I accepted all my birthday gifts with gratitude.

Except (conjunction) - apart from; otherwise than; were it not true

When Susan travels, she packs everything except the kitchen sink.

• A Lot vs. Allot

A lot (noun phrase) - many

A lot of people came to the party.

"A lot" is always two separate words. "Alot" is not a real word.Allot (verb) - to distribute, give or assign

Fifteen minutes were allotted to each of the speakers at the conference.

Allusion vs. Illusion

Allusion (noun) - an indirect reference

The Austin Powers movies often make allusions to the James Bond films.

Illusion (noun) - a false idea or conception.

• The magician created the illusion that he was levitating.

Bad vs. Badly

Bad (adjective) - not good

• Your feet smell bad.

Badly (adverb) - not well; in a bad manner; harmfully; incorrectly; wickedly; unpleasantly

• Charlotte plays tennis very badly.

• The people involved in the accident were badly hurt.

*Here, a note. Adjectives generally describe nouns, so even if you use the word "bad" following a verb in a sentence, if it's meant to describe the thing itself, then use the adjective. "Bad" here means the same as "rotten," "rancid" or "stinky," all of which are adjectives. If you can replace "bad" with another adjective and still have a sentence that makes sense.To say, "your feet smell badly" is to say that your feet are inhaling through the nose and perceiving odors, and that they're going about it all wrong.

Borrow vs. Lend

Borrow (verb) - to take or accept something for a short time with the intention of returning it to its rightful owner

• May I borrow a pencil, please?

Lend (verb) - to give something for a short time with the intention of getting it back

• Would you please lend me a pencil?

Breath vs. Breathe

Breath (noun) - air taken into the lungs and then let out

• Take a deep breath.

Breathe (verb) - to inhale and exhale

Just calm down and breathe.