

# MAGN<sub>IEEE</sub>R



**ENGINEIOUS**

**UET IN FOCUS**

**STUDENT CORNER**

**JOBS AND SCHOLARSHIPS**



# ABOUT US

## EDITOR MESSAGE

**"Do not wait; The time will never be just right'. Start where you stand, And work with whatever tools you may have at your command, And better tools will be found as you go along."**

To initiate something is the most difficult path to success. But then "the moment" one starts thinking-what he/she will do if he/she lose? He/she lost....This spurs us on not to quit. All along this journey, we never thought of giving up because we believed, and still believe that failure is not the worst thing in the world. Certainly, the very worst is, not to try.

Our goal is to commence and set new trends in, both intra and inter-departmental communication, and coordination, and at the same time provision of an outlet to the students to express their creative potentials. Having set these objectives before us all, we are eagerly looking forward to the creative participation of students from all departments and remote campuses of the university in the magazine, which of course belongs to you all.

As for the format of the MAG is concerned, we are earnestly intending and trying to enlighten and entertain the students in a better and unique way. The current issue includes an informative chronicle of our University — unearthing its past glory, revealing its shining present and prophesying an even better future. The issue will also include stories other than those you might find anywhere else, like teachers' and students' interviews, students' views and reviews, interesting project reports which leads to enhance the practical work, technology updates, solutions to your technical problems, and a lot more...

Through this we try UET Peshawar student's community to express and exhibit their creativity and independent thinking via various genres of creative endeavors-prose, poetry, fiction, travelogue, photography, articles, fact analysis etc. We work on the principal, *that every day do something that will inch you closer to a better tomorrow*, so we encourage our students by passing the message that every job is a "self portrait" of the person who does it, so autograph your work with excellence.

In addition we also want to thank those who have criticized us. For those, who have a right to criticize, have hearts to help. So we consider and take each and every criticism with

open hearts and a measure of self assessment.

To conclude, I want to offer gratitude to all those who have supported us in this journey, and bundle of thanks to all the faculty members who cooperated a lot, in the success of the MAGNIEER.

**Don't search for inspiration when you have a task to do; just start your work and you will see that it will soon find you.**

### Editorial Board

#### MAGNIEER

#### About IEEE Peshawar Subsection

IEEE Peshawar Subsection was founded in 2005 under the dynamic leadership of Prof. Dr. Azzam ul Asar. Subsection formation was soon followed by the creation of first IEEE Student Branch in the province with Prof. Dr. Azzam ul Asar and Engr. Farah Mahmood as the founding members. The Peshawar Subsection and Student Branch, IEEE CREATE (Center for Research in Engineering and Advancement of TEchnology) have carried out various events of international repute. Some of the most notable events include International Conference on Emerging Technology (ICET), International Symposium on Nanotechnology, International Symposium on Alternative Energy Resources, International Symposium on Energy Solutions for Pakistan, International Symposium on WiMAX Technology, Projection Competitions and Programming Competitions just to name a few.

IEEE Peshawar Subsection and IEEE CREATE together provide opportunities for professionals and students to excel in their academic career enhance their professional skills and share knowledge through networking with renowned scholars, researchers and entrepreneurs.

IEEE Peshawar Subsection and IEEE CREATE warmly welcome all professionals and students who are interested in becoming a part of the enthusiastic team of IEEE and who are up for the challenge of reaching engineering excellence. For more information regarding IEEE Peshawar Subsection contact [farah.mahmood@ieee.org](mailto:farah.mahmood@ieee.org)

Happy Reading!

## MAGNIEER TEAM

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Omama Masood (Elect Batch 4)



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From left to right:

Numan Khursheed, Ahmad sharif, Majid Shah

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Sir Iqbal Arif Utman (Lecturer UET Peshawar)

Saddam Khan (Electrical Batch 6)

UET

*IN FOCUS*

# Teachers' Viva

Your Favorite  
Movie



Pearl  
Harbor

## Dr Inayatullah Babar - Electrical Department

### A brief introduction

I am basically from D.I.Khan. I did my schooling from D.I.Khan and FSc from Edward College Peshawar in 1991. Then I got admission in Electrical dept. UET Peshawar in 1992. . I joined UET Peshawar as a lecturer in 1997, went to George Washington DC for MS and PhD in 1999 and came back in 2005.

### How do you think a friend who knows you well would describe you?

People find me friendly as I am not kind of dominating person. I can have discussion with people of all ages on any kind of topic.

### What do think you do best?

I think teaching but still I am improving my teaching and research skills.

### What type of student were you in school and college life?

I was a shy student and was always reluctant to participate in extracurricular activities. I wish I could go back and be a student again and could participate in different activities.

### How much do you sleep a day? JUST 12 hours. ;)

### Describe your leadership skills?

Ok! but still improvement is needed. A good leader should be a good listener.



## Sir Asif - DCSE

### A brief introduction

I have two brothers and three sisters. My mother is a house wife and father has been passed away so I am the head of my family.

### How do you interact with people?

Normally I don't interact with people, love to be silent.

### What did you learn from participation in extracurricular activities?

Team spirit and confidence.

### What type of student were you in school and college life?

I was not that much studious indeed I was an intelligent one.

### Tell us the name of a book you have read that had a powerful influence on you?

Zavia by Ashfaq Ahmad.

### Describe your most exciting university experience?

Spending time with friends was always a great fun in university. During teaching I spent a night with my friend in hostel that was most memorable.

### How do you spend your spare time?

By reading books, with friends and sleeping.

50 first  
Date



## Dr Irfan Mufti - Mechanical Department

### A brief introduction

My father was a government servant so we traveled all over Pakistan and finally get settled in Peshawar after his retirement. My elder sister is in U.K and younger brother is in Peshawar.

### Who is your inspiration?

My inspiration is my grand father, Engineer Ubaidullah Durani. He was a principal of Engineering College Peshawar, got retired in 1971 and died in 1990.

### Your favorite book?

Three cups of tea by Greg Mortenson. Its about Pakistan and people of Pakistan.

**Your favorite movie?** For this year its "My name is khan" and also "3 idiots".

**If you become invisible for a day what will you do?** I will be helping out people.

**What accomplishment were you most proud of?** Helping poor students getting a job.

**What type of student were you in school and college life?**

Very naughty, very naughty but I was always one of the top three students.

**If you find your student doing naughty stuff in class what would be your reaction?**

When I was about to join this university my uncle advised me that never loose temper in class. If a student is doing such thing then my lecture might not be interesting which means I need to improve my lecture. A lecture should not exceed 45 minutes.

**Do you like parties?**

Use to go out and do parties in student age but not now.

My name  
is khan



## Professor Tahir Attiq-Department of Basic Sciences

### A brief introduction

I am basically from Peshawar, did my schooling from Peshawar government school then joined islamia college. I did my MSc from Gomal University Dera Ismail Khan and Mphil from Punjab University. I started teaching at PAF degree college and worked there for three years. Then I joined this university after doing specialization in electronics.

**What type of student were you in school and college?**

I was an average student not naughty indeed very serious kind of student.

**Tell us about your extra-curricular activities and interests?** Reading and just reading.

**Your favorite book?** All books of physics are my favorite books.

**What is your opinion about U.E.T students?** They are the cream but need to be polished.

**Do you prefer working independently or in a group environment?**

Group environment is always better to work in.

**What do you think you do the best?** I think teaching.

**Who do you admire the most?**

All senior professors, who have made their contribution to this university.

**Do you believe in multimedia mean of teaching or you prefer using board?**

Teaching on board is better than using multimedia. If you want to end up the course in less time then you use multimedia.

Chakori.



# SOCIETIES UPDATES



## IEEE Orientation:

The team of GINI (Global Integrated Network of IEEE) coordinators in Islamabad invited the IEEE CREATE team Peshawar Subsection to EME NUST on June 4, 2010 for IEEE orientation. This orientation was arranged to increase interaction between the two student branches. In this orientation the GINI coordinators guided the IEEE CREATE team and gave them a briefing on how to run the branch effectively and efficiently. This orientation was a basic step towards increasing interaction between different student branches of IEEE and to arrange different mutual mega events.



## International Symposium:

An international symposium on energy crises in Pakistan was arranged on 17<sup>th</sup> May 2010. It was joint venture of UET Peshawar and Comsats Abbottabad under the umbrella of IEEE. Many renowned scholars from NEPRA, PEPCO, NUST-EME, IEEE Islamabad section, Comsats and UET Lahore were there to throw light on different aspects of energy crises and their solutions. This symposium proved to be very informative and useful for the students who attended this event. It really provoked



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the thoughts of the participants and will definitely help in solving energy crises in Pakistan.

## Quiz Competition:

A quiz competition was organized by IEEE CREATE team on March, 2010. Leading organizers were Ammara Ghani, Sara Nasir and Omama Masood. This kind of format was followed first ever in quiz competition in the history of UET Peshawar. Quiz was based on academic and general knowledge questions. In this quiz the students were supposed to remain alert and reflect upon the knowledge they have gained during their course of study to answer the different set of questions being posed to them. The winning team was from Department of mechanical engineering while the runner up team was from Department of Electrical engineering.

## Gaming Competition:

To expel out all the accumulated frustra-



tion, we provide you the chance to hunt down and eliminate exhaustion. A healthy quiz competition was arranged by IEEE CREATE team on December 2010. Stu-



dents from different programs participated in this event. There was separate competition for girls.

## Programming competition:

It's a speed programming competition. This event was arranged by Ammara Mehd Ghani, Noman Khurshid and Ahmad Sharif from IEEE team, in February 2010. It was a C++ programming competition in which students from different departments showcase their skills in programming.



## Workshop on self confidence:

This workshop was being arranged by the coordination of IEEE CREATE UET Peshawar and BATS team from IM sciences. It was two days workshop in which different activities were held to improve the confidence level of the students. There they learn how to present their ideas in the form of presentations, to interact with each other and how to groom their personalities.

It was a big success for IEEE team, so IEEE is interested to arrange it again and again for the rest of UET Students.



BAT and IEEE team

***"You don't have to be great to start but you have to start to be great."***



10th October Saturday 2009:

A one day seminar on

**"ROLE OF FIRST EARYHQUAKE ENGINEERING CENTRE OF PAKISTAN AFTER 2005 KASHMIR EARTHQUAKE"**

was conducted at NWFP UET Peshawar, jointly organized by Department of Civil Engineering and UET Computer Society.

Director of the Earthquake Engineering Center, Prof. Dr. Qaisar Ali was the guest speaker on this occasion. He highlighted the role and projects conducted by first Earthquake Engineering Center of Pakistan at NWFP UET Peshawar.



# LDS

The event, with the theme, "Freedom of Expression", was organized by the Literary and Debating Society (LDS). The students from different discipline of UET Peshawar and Mardan Campus show-cased their work there. Lecturer Afsheen Abbas and Lecturer Qurat-ul-Ain from Fine Arts Department, University of Peshawar were the judges.

The main categories were Painting, Glass painting, Calligraphy and model.

In **Calligraphy**, Faizan from Computer Systems Department stood 1st and Sohail Ahmad of Mechanical Department got 2nd position. In **Painting** Kambez of Electrical Department grabbed 1st position on presenting human sketches, while Salman Ahmad of Software Department mardan stood 2nd.

**Model works**, made with clay and wood were also exhibited in which Shoaib Ahmad from Computer Systems Engineering and Sundas from Telecommunication Engineering, UET Mardan Campus got 1st and 2nd positions respectively. In **Glass Painting** Sehrish

Mustafa of Electrical Department and Faizan Khan of Computer System Department received 1st and 2nd positions respectively.

Dr. Azzam gave away the prizes and certificates to the winners and LDS organizers. He urged students to use their academic years to develop interpersonal skills so that when they enter into practical life, they should be able to keep themselves in step with modern trends.

### One Day Training Seminar On "Exploring Entrepreneurship & ITS Components"

**LDS week** is arranged in June, 2010 under the supervision of president Mr. Farhan (8th sem Mechanical department) and vice president Miss Mehwish Khattak (8th sem, CSIT).

Different events like Naat and Qirat competitions, debating and dramatic day and all rounder quiz competition was held in this week.



strated their interest in becoming a part of this first ever entrepreneurial venture of the university.

Ahmad Khan from the Electrical Engineering Department was the Chief Guest at the occasion.

#### Other events:

Executive Cabinet of ASME NWFP UET Peshawar was invited by the NFC Institute of Engineering & Fertilizer Research, Faisalabad, in order to **Initiate the American Society of Mechanical The Engineers' Student Section** at their institute.

#### ASME Quiz competition:

First technical quiz competition was arranged by ASME team on 20th May, 2010.

Many students from different departments participated in this very competition.



# ASME

NWFP UET PESHAWAR STUDENT SECTION



One day industrial Trip to the multi-national **Pakistan Tobacco Company at Akora Khattak** under industrial Collaboration program of ASME.

A group of 30 students visited different departments of the factory and learned about the engineering operations, manufacturing, maintenance, and management in detail. The HR Officers of PTC, Miss. Saima Ali and Mr. Osman Ahmed applauded the efforts of the NWFP UET's administration for having fast and efficient links with industries.

A team of four final year students from NWFP UET Peshawar consisting of Mr. Malik Usman (Mechanical), Mr. Fahim Ahmad (Mechanical), Mr. Muhammad Faizan Khalil (Mechanical), and Mr. Muhammad Abid (Industrial) brought laurels to the university by winning the 2nd Prize in the **ASME International Student Design**

**Contest 2010** at the Student Leadership Seminar held at UET Lahore from 27th Feb – 02nd March, 2010.

ASME Student Section at NWFP UET organized the first ever **Oral Technical Presentation Contest** on the lines of International Old Guard Presentation Contest.

25 students from all the departments of NWFP UET participated with a diverse technical creativity and demonstrated their learning and innovation in the respective areas of research.

The Technology Incubation Centre & ASME Student Section arranged a seminar on the basics and know-how of **the Technology Incubation** and how could it be initiated at NWFP UET Peshawar. The speaker at the occasion was Prof. Dr. M.A. Irfan Mufti, the head of Technology Incubation Centre, NWFP UET. A very comprehensive and elucidating student session was observed in which senior-year students of all the departments of NWFP UET demon-



Imagine  
With all  
Believe  
YOUR mind.  
With all  
Achieve  
YOUR heart.  
With all  
YOUR might.

## Achievers of UET Peshawar



### Dr. Asmatullah Khan

Dr. Asmat did his BSc in Electrical Engineering in 1992 from NWFP University of engineering and technology, Peshawar with highest Honor. He received Gold Medal from UET Peshawar by securing the highest overall marks. He was also granted presidential award for securing best overall academic position in all technologies. He was awarded Azaz-a-Sabqat from the President of Pakistan in 1994. He was granted Quaid-e-Azam scholarship for study abroad. Later he completed his PhD from Georgia Tech in

1999. He was awarded excellence award from Loughborough University, UK and outstanding achievement award from Georgia Tech, USA in 1999. Recently he got appreciation certificate from Kyung Hee University, South Korea. He is also the recipient of Best University Teacher award from Higher Education Commission, Pakistan in 2005. He has written more than 70 research papers in national and international reputed journals.

Currently he is teaching in Electrical Engineering department, FAST Peshawar. He is creating a research group of signal processing which would be a joint venture of

UET Peshawar and Fast Peshawar.

In his brother's (dr. inayatullah babar, professor electrical engineering department



UET Peshawar) view, Dr. Asmatullah babar has got a very caring attitude for his family and others as well. He is helping in nature. He is always been a guideline for me in both personal and professional life and I admire him.

### Dr. Haseeb Zafar

Dr. Haseeb Zafar received the Ph.D. degree in Wireless Mobile Ad-hoc Networks from the University of Strathclyde, Glasgow, UK in 2009, the M.S. degree in Telecommunications and Computers from the George Washington University, Washington DC, USA in 2003 and the B.Sc. degree (with Honors) in Electrical Engineering from N-W.F.P. University of Engineering and Technology, Peshawar,

Pakistan in 1996. He is currently an Assistant Professor in the Department of Computer Systems Engineering at the N-W.F.P. University of Engineering and Technology, Peshawar, Pakistan. His research interests include Computer Networks, Wireless Communications and Mobile Ad-



hoc, Sensor and Mesh Networks. He is a member of the IEEE and IET. He has presented his research work in various international conferences including the IEEE ICSPC and the IEEE LCN. He is an active reviewer of many international journals including the IEEE Communication Letters and the IET Communications. Moreover he is the TPC member of several international conferences including IEEE GLOBECOM, IEEE ICC, IEEE VTC, IEEE CCNC and IEEE WCNC.

### Engr. FAHAD KHAN

Mechanical Engineer (Pakistan Atomic Energy Commission)

Member - SDOB Pakistan Advisory Committee

Former Communication In charge (ASME SDOB Asia-Pacific)



Former Student Chair (NWFP UET Peshawar Pakistan)

One of the greatest achievements of his educational career was to get a chance to represent the District-G (Asia-Pacific rim) at the Leadership Training Conference that was held at Los Angeles, CA, in 2009. Winning the Outstanding SDOB Performance Award and the 2nd stand in the ASME Big Picture Challenge was more like his dream come true when his toiling work and dedication paid-off in a great fashion.

### MESSAGE:

Life is made up of collection of moments. Before you get any older, don't forget all the wonderful experiences you have learned and the things you have done... even if it is during the hard times because what you can learn can help you accomplish so much more lately in life. Life has shown me how wonderful it is to be alive. So take care of yourself and those around you.

**High achievers spot rich opportunities swiftly, make big decision quickly and move into action immediately. Follow these principles and you can make your dreams come true**

# FAVORITE SPOTS



*VC Lawn*



*Civil Lawn*



*Electrical Stairs*



*Electrical Corridor*



*Abbottabad Campus*



# Scariest Places

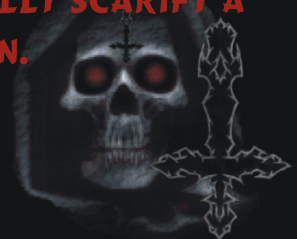


**STAIRS IN ELECTRICAL DEPARTMENT LEADING TOWARDS...SPORTS OFFICE**

**THIS PLACE IS LOCATED AT THE REAR END OF "MINING DEPARTMENT". IT IS AN UNDERGROUND PASSAGE.**



**ABBOTTABAD IS ONE OF THE MOST BEAUTIFUL PLACES OF OUR COUNTRY AND THE CAMPUS IS NOT LESS THAN A PARADISE ON EARTH. BUT THERE ARE SOME PLACES WHICH REALLY SCARIFY A PERSON.**



# SEASONS



Abbottabad Campus



VC Lawn



Transport Office lawn



Electrical Dept



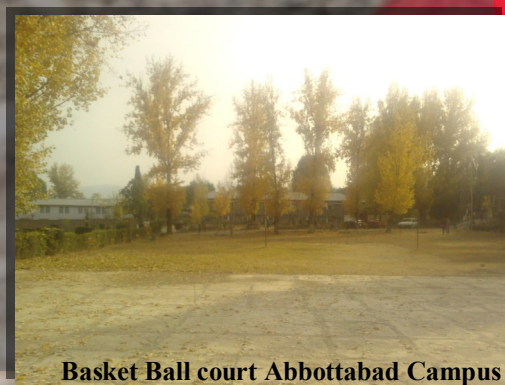
UET Girls Hostel



VC Lawn



Civil Lawn



Basket Ball court Abbottabad Campus



Main Offices



Abbottabad Campus



ENG-GENIOUS

*e*nside...

## Wireless speed freaks set to leave Wi-Fi standing

Wireless-Fidelity as we know is reaching the limits of its usefulness. It just can't keep up with our appetite for services, such as new video formats, that gobble up bandwidth. So what's next in the world of blisteringly fast home-based wireless technologies?

To date, most Wi-Fi hotspots use one of three connectivity standards, 802.11a, 802.11b and 802.11g - the current favorite. Wi-Fi devices connect to the internet over the radio waves in bands around the 2.4 gigahertz

and 5 GHz frequencies, as defined by IEEE.

Last year, the IEEE agreed the specification for a new Wi-Fi standard, 802.11n, which operates in both the 2.4 GHz and 5 GHz bands. This standard is theoretically capable of transmitting data at 300 megabits per second comparing to 802.11g's paltry 54 Mbps. The new Wi-Fi

standard should make streaming high-definition video a less jerky experience than it has been so far. And further changes

may take speeds up to 600 Mbps.

Based on past experience, even the additional bandwidth will soon get eaten up by data-hungry services, so what are the prospects for even faster wireless transmission?



One method being considered is to transmit data in a different band of frequencies.

Several business companies are already building systems which can operate around the 60 GHz band, including the IEEE's

proposed 802.11ad standard.

In mid-2009, the Wireless Gigabit Alliance (WiGig), a consortium of technology companies including Microsoft and Intel, published its specification for 60 GHz wireless communication technology.

Ali Sadri, president of WiGig, says;

*"Its protocol will support data transmission rates up to 7 Gbps. At that speed, you could download the equivalent of a Blu-ray disc onto your laptop in seconds"*



## Cell phone vibrations aid mind-controlled movement

Identifying telltale brain patterns promises that in new era all manner of objects can be controlled by thought. But telling brain patterns apart is devilishly difficult. Now cybernetics researchers think a mild buzz from the gadgets that make phones vibrate will focus the mind. Several groups have already developed wheelchairs, including Francisco Sepulveda's team at the University of Essex in Colchester, UK, whose system involves

wearing an electrode-filled skullcap connected to a PC running brain-computer interface (BCI) software which can sense four types of thoughts, represented by electroencephalogram (EEG) potentials. The user thinks about their feet to move forwards, their tongue to stop, and their right or left hands to proceed in those directions.

But being able to move in only three directions is clearly very limiting. Now Anne-Marie Brouwer and colleagues at the TNO research

organisation in Soesterberg, the Netherlands, believe they may have a more liberating approach. They have developed a system called tactile BCI, which uses a physical sensation to provoke an EEG potential called a P300.

The researchers placed 12 phone vibrators, positioned like the numbers on a clock, on a belt worn around the wheelchair user's waist. These vibrate sequentially for 3 seconds each. If they wearer wants

to go, say, in a 4 o'clock direction, they wait until the appropriate "tactor" vibrates and then think "that one". *"That generates a P300 and selects the movement direction you want,"* says Brouwer.



The technology could make getting around easier for people with Lou Gehrig's disease

## 3D display made of flying pixel-copters in the works

This may be the year that 3D television sets flood the market, but some engineers have turned to aircraft in search of a viewing experience that is still more immersive.

Two teams at the Massachusetts Institute of Technology are working on a

unique 3D display dubbed Flyfire, in which a flock of tiny aircraft carrying multicolored LEDs hover in front of the viewer to form an image. As pixels that can move through space, the free-flying LEDs could form a shape-shifting 3D

display. As well as the pixels displaying moving images like a normal screen, they could change their position to add real depth.

*"We're fascinated by the idea of flying pixels,"* says E. Roon Kang at the SENSEable City Laboratory. *"It's a 3D display with a dual aspect - it can show an*

*image like a traditional display, but then those pixels can move and transform into another shape."*



# Science Behind The Vision

## Wireless Electricity or WiTricity

### The Idea

Today, portable technology is a part of every day life. Having your stereo, telephone or computer tied to a wall is a thing of the past. But almost all portable devices are battery powered, meaning that eventually, they all must be recharged –tying the user back to the

wall he was trying to avoid.

Now imagine that instead of plugging in your cell phone, laptop or mp3 player to recharge it, it could receive its power wirelessly—quite literally, “out of thin air”. Sound like science fiction? It’s much closer to reality than you might think.

Wireless Electricity or WiTricity is rooted in such well-known laws of physics that it makes one wonder why no one thought of it before. In the past, there was no great demand for such a system, so people did not have a strong motivation to look into it.



A team from MIT has experimentally demonstrated an important step toward accomplishing this vision of the future



Wireless power transfer over two-meter distance, from the coil on the left to the coil on the right, where it powers a 60W light bulb. Members of the team that performed the experiment are obstructing the direct line of sight between the coils.

## How is it done...

### The key: Magnetically Coupled Resonance

WiTricity is based on using coupled resonant objects. Two resonant objects of the same resonant frequency tend to exchange energy efficiently, while interacting weakly with extraneous off-resonant objects. A child on a swing is a good example of this. A swing is a type of mechanical resonance, so only when the child pumps her legs at the natural frequency of the swing is she able to impart substantial energy.

In any system of coupled resonators there often exists a so-called “strongly coupled” regime of operation. If one ensures to operate in that regime in a given system, the energy transfer can be very efficient.

The investigated design of WiTricity consists of two cop-

per coils, each a self-resonant system. One of the coils, attached to the power source, is the sending unit. Instead of irradiating the environment with electromagnetic waves, it fills the space around it with a non-radiative magnetic field oscillating at MHz frequencies. The non-radiative field mediates the power exchange with the other coil (the receiving unit), which is specially designed to resonate with the field. The resonant nature of the process ensures the strong interaction between the sending unit and the receiving unit, while the interaction with the rest of the environment is weak.

At first glance, such a power transfer is reminiscent of relatively commonplace magnetic induction, such as is used in power transformers, which contain coils that transmit power to each other over very short distances. An electric current running in a sending coil induces

another current in a receiving coil. The two coils are very close, but they do not touch. However, this behavior changes dramatically when the distance between the coils is increased. Here is where the magic of the resonant coupling comes about. The usual non-resonant magnetic induction would be almost 1 million times less efficient in this particular system.

### Radiation Methods

Various methods of transmitting power wirelessly have been known for centuries.

Perhaps the best-known example is electromagnetic radiation, such as radio waves. While such radiation is excellent for wireless transmission of information, it is not feasible to use it for power transmission. Since radiation spreads in all directions, a vast majority of power would end up being wasted into free space.

### Mutual Induction

*Mutual induction* is the production of voltage across a conductor situated in a changing magnetic field or a conductor moving through a stationary magnetic field. This allows for the wireless transmission of electricity over a very close proximity.



The “Splashpad”, a brand of wireless charging pads based on mu-

# INSIDE PROJECT

## GPS Guided Miniature Autonomous Vehicle

Zubair Khawaj, Fahim Khan, Ahmad Sharif, Qaiser Habib

### Introduction:

Autonomous Vehicles(AV) are the focus of active research these days - many remarkable achievements have been made in the scenario and it can safely be predicted that in the next two decades, completely autonomous routinely driven vehicles will be in contemporary usage. Our project focuses on building a miniature version of the future's AVs; lack of resources restrains the scope of our project - nevertheless, we will try to develop the intelligence of the vehicle to a near-perfect level.

### Construction:

The basic setup of our AV includes a toy car fitted with a GPS receiver, a GSM transceiver and a microcontroller which relays traffic from the central brain computer to the car's actuators - the controller is a laptop computer with our custom Google Maps™ Application which will house highly intelligent algorithms for controlling and maneuvering the car. The intelligence part will rely on Artificial Neural Networks for effective non-linear decision making.

### Functioning:

The car takes its basic course information from the user via a highly user-friendly Map such that, the user can simply click on a point on the map and the coordinates are automatically sent to the

car for navigation. The Google Maps API that we'll be using in our application works basically on a Javascript controlled function set such that, upon clicking a specific point, it provides us with the Longitude and Latitude of that point. Thus, our custom application, which has been designed in Microsoft Visual C# will feature

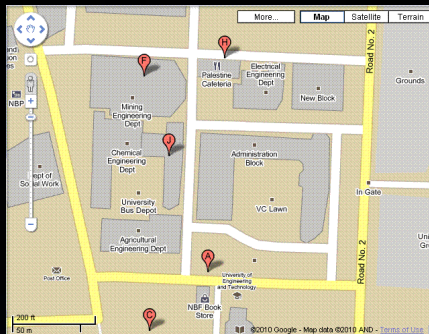
point while avoiding any obstacles which may come in the way.

A basic profiling mechanism may also be integrated in the car's controller such that a track of all the obstacles on a specific path is temporarily kept and reused in the future. Collision Detection will be performed using various sensors

controller resides on a remote, more powerful laptop computer and relays its decisions to the car via a wireless link and store the obstacle profiles. This, nevertheless, poses greater challenges in terms of wireless networking i.e. we'll be needing an ultra fast wireless protocol which has a long range - perhaps in the future, with additional resources, we may accomplish our goal using an UWB or WiFi link for short-range and WiMAX for long ranged applications.

### Conclusions:

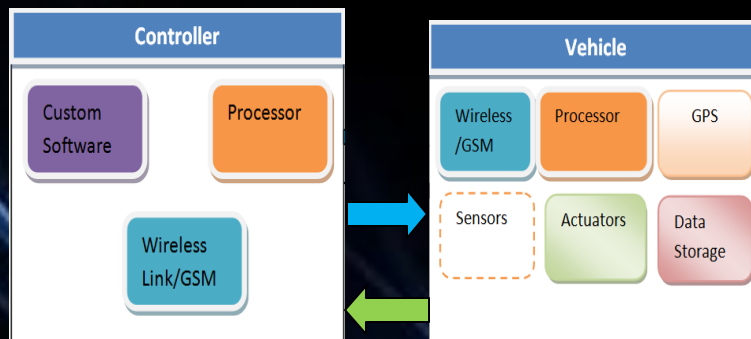
Admittedly, our project has the apparel of a hobby project - in the course of it, however, we hope to learn numerous networking, programming and problem solving techniques. The controller that we'll be developing can be applied to a real-time vehicle with only a few modifications and in the course of our future's academic track, we intend to do just that. With more sophisticated sensors like Radars, Sonars, 3D-Sensors etc, and more powerful microprocessors and wireless links, we hope to create an Autonomous Vehicle which may someday drive the roads with little human intervention, thus making the overall human life safer and convenient.



A typical Google® Map



Custom built Toy Car



Block Diagram of the project

Javascript based browsing capabilities so it'll navigate to the Google Maps website while providing it with our custom coordinates. Once the user clicks on a point, the coordinates of that point are taken, a path is determined from the target's coordinates and the car's current location, and then that path is supplied to the car for navigation. The car's microcontroller will then try to move the car to the target

which will work in complete coordination, creating a multidimensional image at all times for increased accuracy.

While limited memory and processing on the car's end may pose a problem, we have high hopes for overcoming this problem in the future by using more powerful controllers - one alternative may also be a "LIVE" controller: the

# PAKISTAN BEST PROJECT

## MagnoTouch Surface (Project of CSE 06, UET Lahore)

**Project Supervisor**  
Muhammad Awais Hassan.

### Team

Asma Farhat (Team Lead)  
Saba Sarwat  
Iram Nawaz  
Sobia Amjad

### What is Magno Touch?

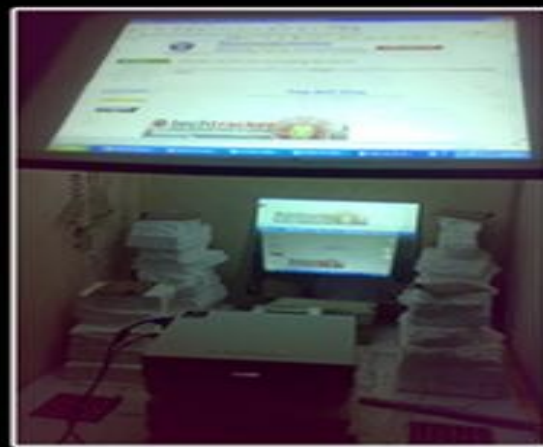
Magno Touch is a touch screen that allows the user to interact with the system by touching the screen instead of using mouse or keyboard. For example, it provides an intuitive interface in which finger acts as a pointing device, it operates easily on the surface, and manipulates the objects with a single touch.

### Capabilities of MagnoTouch Surfaces

Large and intuitive interface  
Optical based touch surface:  
Magno Touch surface allows you to manipulate Mouse Control Paradigm i.e. Clicking, Dragging and movement.

### Abstract

Advancement in technology has replaced typewriters with computers. We, the human beings, always gaze at the new dimensions and possibilities that may offer more ease in our daily life. Similar efforts are taking place in multi-touch community to provide the users with interactive interface. Control is now shifting from keyboards to the tips of our fingers. Microsoft surface is the evidence of this comfort, heave and sumptuousness, but it is not easily



Over look of the magno touch

accessible in local markets and its expected cost is about 10,000 dollars plus expenses involved in importing.

Our main goal was to design and build a low-priced and economical

multi-touch surface that will be easily accessible to every human being and may provide all the multi-touch interaction facilities

### Required Hardware:

Following ideal hardware

is required to construct a multi-touch surface.

- Plexi glass as a diffuser for IR light
- IR camera for detecting the finger touching surface
- IR lamps
- An IR camera
- Short throw Projector
- A box to place all the hardware tools

**Total Cost:** Rs.50000

### Status

#### Current status

So far, we have developed an effective single touch-based interface, running various interactive applications in less lighted environment.

#### Future prospects

We will extend Magno Touch by incorporating MUTI-TOUCH technology Framing Magno Touch dealt with an illuminated environment. We will also develop Intricate Engineering Applications to acquire Market Appeal for Magno touch.

### Details of the prizes

- Won the 1st appreciation prize in DICE COMSATS Lahore 2009
- First prize in All Pakistan multimedia competition in GIKI
- 3rd prize in All Pakistan PAF KIET Competition at Karachi
- Second prize in All Pakistan Software competition at NASCON 2010 Islamabad
- Representing Pakistan in MS Imagine Cup 2010 in Warsaw Poland

For detail about project check project home page

[h\\_t\\_t\\_p://magnotouch.computerscience.pk](http://h_t_t_p://magnotouch.computerscience.pk)

# Technical Paper

## Design and Construction of a Frictional-Brake Absorption Dynamometer using Electrical Strain Gauges

Malik M. Usman, Zahoor Ali, Nurtaj Sultana, Sajjad Ali, Ayesha Maroof  
Advisor: Prof. Dr. Irfan Ullah

The project is to design and construct a Frictional-Brake Absorption type Dynamometer using electrical strain gauges in order to calculate the power output of low speed prime movers like Wind Turbine, Cross Flow Turbines, etc. An electrical motor or a cross flow turbine can be incorporated for measuring the required parameters in the Instrumentation Laboratory of Mechanical Engineering Department, NWFP UET Peshawar.

This research-oriented project aims to design and develop an indigenous and in-

novative mechanism which is simple and precise in calculation and can produce accurate results for different varying loads. The technique is implemented for the first time on the undergraduate level in the field of Engineering Instrumentation in Pakistan.

As the dynamometer is an absorption frictional-brake type; its shaft will be coupled to the rotating shaft of an engine / motor. Electrical strain gauges are to be mounted on the dynamometer shaft. On the application of brakes; the

dynamometer will tend to stop the engine; which will in turn create a twist in the shaft as a result of which the gauges will become elongated and their strain will be recorded through a "Data Acquisition System".

The Data Acquisition System is designed using a pure microcontroller-based approach with its initiation from the Wheatstone Bridge of the four Strain Gauges mounted on the shaft. On application of load, the bridge will become unbalanced so a Voltage O/P (in Milli Volts)

will be generated from the bridge. This O/P Voltage is amplified using a constant gain and is then fed to the 2051 Microcontroller via an ADC. The output of the Microcontroller is fed to an Infra Red Sensor mounted on the shaft. This IR Sensor transmits this signal to the IR Receiver present in the range of the dynamometer, wirelessly. On receiving the signal, an 8051 microcontroller manipulates it and displays the corresponding value of voltage generated from the Wheatstone Bridge in terms of the Mechanical Strain created due to the load twist.

Speed sensor will be installed on the apparatus which will measure the rpm "N" of the dynamometer shaft.

The following formulae govern the measurement proceedings:

$$\gamma = \tau \times G$$
$$= \tau T \times r / J$$

Where:

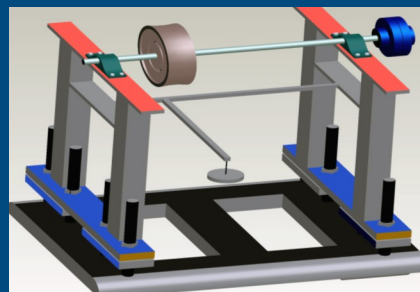
$\tau$  = Shear Stress

$\gamma$  = Shear Strain

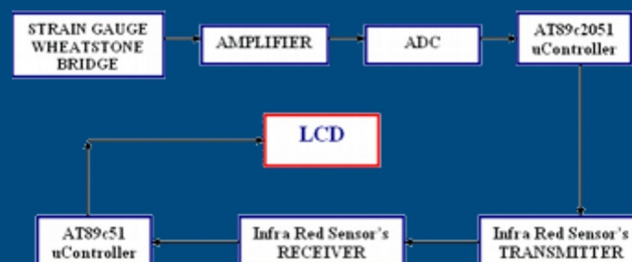
$T$  = Torque

$J$  = Polar Moment of Inertia

$G$  = Shear Modulus



A 3D  
Model of  
the  
FBAD in  
Pro/Engi



The Data Acquisition System

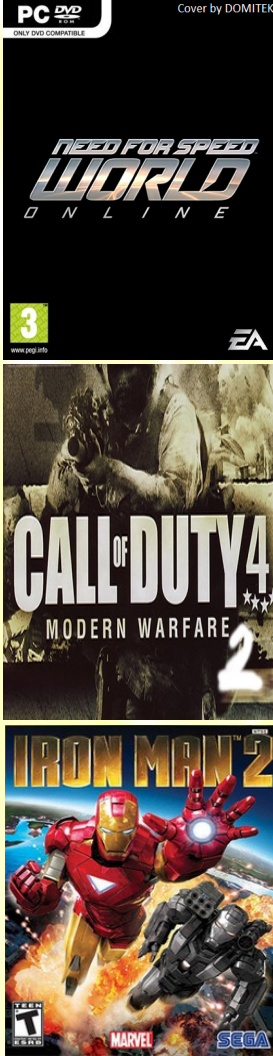
On obtaining T power can be calculated as follows:

$$P = T \times \omega$$

Where  $\omega$  = angular velocity; and can be calculated as:

$$\omega = 2 \times \pi \times N$$

This project is pursued as a Final Year Project and is deemed as a break-through in the field of instrumentation and Mechatronics because of its innovative approach and total industriousness.



## Latest Games Update

### Need for Speed: World

If you are a racing freak, you'll soon be able to dive back into the world of Razor Callahan in **Need for Speed: World** from EA and developer Black Box. This is the first MMO racer from EA since 2001's Motor City Online and represents a different approach. **World** takes on the gameplay style of **Most Wanted** and **Carbon**, focusing on illegal racing, tuning and police chases, and adds classic MMO elements to the mix such as special abilities. **World** also features the cities of Rockport and Palmont, the cities of Most and Carbon respectively, into its map design,

along with a full night/day cycle. It also features co-op game play and team based game modes where the players play as the police. It will have the most licensed cars; upgrade parts, and game modes ever in the series history.

### Call of Duty: Warfare 2

Winner of The multiple Game of the Year award Modern, **Call of Duty: Warfare 2** is a first-person tactical shooter and the sixth entry in the series. This modern approach brings with it new weapons, action and options. Coupled with a variety of gameplay modes.

After **Modern Warfare 2**, the upcoming sequel of

**Call of Duty** is **Black Ops**. Yet not released so much can't be told about its gameplay, still, according to the teaser trailer, the player would be able to fly an attack helicopter. The player would also get the control of a SR-71 Blackbird guiding a squad on the ground.

Now after the successive run of **iron man 2**, Sega came up with its sequel on May 4, 2010.

**Iron Man** can choose from multiple suits of armor, including Marks 3 through Mark 6. Players can customize upgrades and weaponry on the armor.

**Game Developers Conference (GDC):** The Game Developers Conference (GDC) is the largest annual gathering of professional video game developers, focusing on learning, inspiration, and networking. The event comprises an expo, networking events, awards shows etc.

#### Upcoming events:

**GDC Europe 2010**  
August 16-18, 2010

Cologne, Germany

**G D C 2 0 1 1**  
February 28 - March 4,  
2 0 1 1

San Francisco, CA

**World Cyber Games :** The World Cyber Games (WCG) is an international e-sports event (or "Cyber Games Festival") operated by Korean company .

It unites gamers from all over the world to allow players to enjoy and respect the gaming environment.

#### National Championship

March ~ September,  
2 0 1 0  
Los Angeles, USA

#### QuakeCon:

QuakeCon is a free con-

vention held yearly in Dallas, Texas brought to you by id Software, Bethesda Soft works and their parent company ZeniMax Media Inc. Thousands of gamers gather in one location to play with their friends on a giant gaming network, see the latest in cool technology, hear about upcoming games and compete in world-class tournaments.

#### Recent or Upcoming Events:

Hilton Anatole Hotel -  
Dallas, Texas

August 12-15, 2010

## Events



# SOLUTION CENTER

Waqas Khan: **My PC takes a lot of time at its start-up so how can i make it start faster? And secondly these days viruses related to USB are very common so how can i protect my system against such viruses?**  
24 February



the first part of your question, START-UP problem: every time you boot your computer alot of "hidden" programs load in the background. Some of these hidden programs are essential, but most aren't. Turning off some of these hidden programs can significantly increase your computer's performance and reliability.

Built into Windows is a special tool called the "Microsoft System Configuration Utility" or simply "MSCONFIG." Designed to help you troubleshoot problems with your computer, MSCONFIG can also be used to ensure that your computer boots faster and crashes less.

Go to Run-> type msconfig A System Configuration Utility will open, Click on the "Startup" tab, Now uncheck all the programs you don't want to run at start up.

Now the second part,

**USB VIRUSES :** Well most of the USB Viruses execute automatically whenever you plug it into your PC. This happens because virus creates a replica of the autorun file. In order to minimize the impact of USB based viruses we have to disable the autoplay option. Follow these steps to disable autoplay option in XP :

1. Go to Start, then RUN the following command :

`gpedit.msc`  
2. In group policy editor select Administrative Templates under Computer Configuration tab.  
3. Under Administrative Template select System. On right-side pane you will see option Turn off Autoplay, select it.  
4. Right click on it and select Properties. Select Enabled, then Apply and click OK. That's it. Now you wont get any AUTOPLAY option when you plug in your USB drive to PC. This gives you an option to scan USB drive with antivirus every time you connect USB drive to PC. Thus you can eliminate virus before it invades your computer.

Inam Qazi **Please tell me how Modulation is done ? also some Examples OF modulators**  
28 February

Modulation is done by changing the characteristics (Amplitude, Frequency or Phase) of the CARRIER signal with respect to the MODULATING signal.

MODEM can be a good example as it is a short form of modulator-demodulator. It converts a computer's digital signals into specific frequencies to travel over telephone lines. At the destination, the receiving modem demodulates the frequencies back into digital data.

If you want to visualize various modulation techniques you can do it easily in MATLAB. For further details about modulation check the following links:

<http://www.complextoreal.com/chapters/mod1.pdf>

<http://en.wikipedia.org/wiki/Modulation>

<http://www.youtube.com/watch?v=PNMuf8twHqw>

Muhammad Irfan **Why an exe file could not sent by email or uploaded on facebook ?**  
28 February

You can't send .exe or .bat files through e-mails because the e-mail sites like hotmail and yahoo etc restrict you from doing so. And the reason for restricting you is that viruses are also in the form of .exe and .bat files. Now if you have any important setup file which you want to send to your friend, then you can't simply upload it. So you will have to change the extension of the setup file i-e setup.exe to setup.txt or any other extension. And then you would be able to send it through email.

[www.isi.edu](http://www.isi.edu)  
[www.isi.edu](http://www.isi.edu)

Technologist:  
Ahmad Shareef  
(6th Sem Elect Dep)



# STUDENT CORNER

# Students' Interrogation

What is your most noticeable quality



Confidence

## Tayyaba - 8th Sem Civil De department

Tell us about your family, and your inspiration?

We are four sisters and three brothers and my father is a retired officer. I got inspiration from my elder brothers, who are also civil engineer.

Tell us about your favorite personality?

Dr. Shehzad Ahmed, because he is an unbiased person and has got a very loving and caring attitude in short he is my ideal.

How do you spend your spare time?

Listen to music, read general knowledge books and current affairs. Study about culture variability but most of the time I just think about different beautiful things in my spare time.

Define canteen and library?

Canteen is a place where I go for shughal and halla gulla and about Library, I visit it once in a semester to issue books just to pile them in my room.

Share your interesting memory in uet?

When I was in first semester me and my friends missed our mechanics of solid lab exam. The actual timing for exam was 8:15am but I mistakenly read it 9:15am and my friends blindly trusted me. We were in university at that time but were sleeping in common room. After the exam was over we were called by the chairman then we made an excuse that I got faint and my friends took me to the hospital.

What is your favorite sport?

Badminton, as it is my family sport.

## Madiha Sher - 8th Sem DCSE

Helping

Tell us about your family, and your inspiration?

We are four sisters and one brother. Three of us are in engineering and two sisters are in business administration field. I am the third one. My inspiration is my Mother.

Tell us about your favorite personality?

Zaid Hamid, He is a true patriot and every Pakistani should be like him.

How do you spend your spare time?

Most of the time i sleep when i am free and sometimes i play games on Facebook, Happy aquarium mostly.

Your favorite quote/joke?

My favorite quote is "I respect faith, but doubt is what gets you an education." (Wilson Mizner 1876-1933)

I like all jokes no matter how pathetic they are, they always make me smile.

Funniest or most pathetic viva?

The funniest and pathetic viva I ever gave was my Computer Networks' viva with Engr. Waleed Tariq. I didn't answers to any of his questions. When my theory teacher Engr. Qamar-ul-Ain told sir that she is a good student then sir said sarcastically that "Output tau acha nai day rahin, her question k answer mai just smiles he pass ker rahi hain" And guess what? I scored 2 out of 12.5. Yeah! I scored highest marks ever.

What accessory you cant live without?

my laptop.



Kindness

## Abdul Salam - 8th Sem Electrical Department

*Tell us about your family, and your inspiration?*

We belong to the family of Muhammad (S.A.W.W) I love my family.

*What do you do in your spare time, and your favorite sport is?*

I play computer games. Cricket is my favorite outdoor game.

*What accessory you can't live without?*

My Mobile and Computer.

*Your favorite book/movie? and why?*

My favorite book is Quran because of its perfect teachings and favorite movie is "Maan" Indian movie of Aamir Khan because whenever I watch it, I don't get bored.

*Your favorite quote?*

"It's not your mistake if you can't read the eyes which cheats you, but it's really your mistake if you can't read the eyes which cares for you" (William Shakespeare)

*Any interesting moment in UET?*

When I saw the my result for the first time.

*Which was your funniest or most pathetic viva?*

C++ viva in UET.



Self-confidence

## Malik Usman - 8th Sem Mechanical Department

*Tell us about your family? Your inspiration?*

I have an elder sister and brother. My father is a freelance Photo Journalist and my mom is a house-wife. My Grand Father has been a life-time inspiration for me since my childhood.

*Tell us about your favorite personality and why?*

Dr. M.A. Irfan Mufti, the ex-chairman of Mechanical Department and the current Director of Technology Incubation Center, NWFP UET, is my favorite personality due to his charismatic personality traits and magnificent leadership.

*What do you do in your spare time?*

Watching movies, get-together with friends, a good book some times, social networking, traveling, professional photography, aero modeling, music, some business activities, and last but not the least, the ASME stuff :)

*Define Canteen and Library?*

Canteen is a compulsory part of our daily life which provides us a networking opportunity with students from all the departments in a very casual and relaxing ambiance. While I deem Library as a rescue station just a week before the exams, \*Laughs\*.

*What accessory you can't live without?*

My Cell Phone.

*Your favorite Quote / Joke?*

"Leadership should produce Leaders and not followers". It's my own quote and I solely believe that practicing this vision could actually help all of us and Pakistan at-large.

*Your favorite Sport?*

I love to play Cricket and Chess.





*No place is boring, if you've had a good night's sleep and have a pocket full of unexposed film. ~Robert Adams*

# SAY CHEEZ !!



For me **Photography** is a way to express one's feelings, emotions and love. It reminds one little things and events that occurred in the past, long after you have forgotten them. There is a famous saying "**Photography takes an instant out of time, altering life by holding it still.**"

The first thought that arises in our mind when we think of photography is about camera type. For hobbyists, from 5 to 10 megapixels camera is enough. Choose a 10 megapixels or higher resolution camera if you are a professional and expect to be paid for the work you produce. As it is true, that there are no rules for good photographs, but only good photographs. Yet we will try to cover some key aspects, tips and tricks about photography in this article.

## SOME USEFUL IDEAS :

### Shutter speed:

Allow more time for the existing light to enter by using a longer shutter speed. The key thing to remember about it is that anything which moves in the scene will be blurred due to slow shutter speed. To avoid blurring effect, mount the camera on a flat surface, or use a tripod. This technique is called panning. But sometimes we can use blur to produce creative effect. A fast shutter speed could be measured anything over 1/500th of a second.

If we have a digital SLR (single-lens reflex) we may, even be able to select extremely fast shutter speeds up to 1/8,000th of a second.

### Merging Digital Photos:

How merging can perk up your digital photos?

In order to capture too wide or too big sceneries, you will try to take several shots from left to right or top to bottom.

Fortunately we have a process called merging digital photos or call it stitching digital photos which let you to combine two or more digital photos into one long or big picture.

This merging can be easily made in **Adobe Photoshop Elements**. From the File menu, select Create **Photo merge**, Click the **Browse** button and select the digital photos you want to merge. The digital photos are automatically combined once you click **OPEN**. Select **perspective** if the overlapping parts are angled differently. Check **Advanced Blending** to adjust the differences in exposure.



### Warming effect:

Try, changing your white balance setting from **auto** to **cloudy** when shooting outdoor portraits and sunny landscapes. This adjustment is like putting a mild warming filter on your camera. It increases the reds and yellows, resulting in richer, warmer pictures.

### Polarizing effect:

Polarizing filter is usually used to make shadow areas darker by reducing reflection from other surfaces. It makes their colors look more intense. And transparent. In this context angle to the reflective surface is important.

**Tip:** If your camera doesn't support filters, then you can still attain the effects of a polarizer by placing your sunglasses over the lens. Use them as your polarizing filter. Place the glasses as close to the camera lens as possible, then check their position in the LCD viewfinder.



### How to fix blurry photos?

1. Avoid Camera Shake
2. Lock the focus.
4. Proper lighting or exposure
5. Use the highest resolution your camera is capable of.

For this purpose you can use **Focus Magic** software.

**Focus Magic** uses advanced forensic strength deconvolution technology to literally "undo" blur and recover lost detail. It can repair both out-of-focus blur and motion

blur (camera shake) in an image. It's a powerful tool to sharpen your blurred photos. Unlike other sharpening software, **Focus Magic** increases the "actual sharpness" (with deconvolution) rather than the "perceived sharpness" (with unsharp mask or equivalent).

### Softwares for digital photography:

If you are an independent professional photographer and **Adobe Photoshop Elements** doesn't meet your needs, then **Adobe PS Lightroom 2** is the image editing software you need.

While **Adobe PS Lightroom** was made as an adjunct to **Adobe Photoshop CS 4** to

make it run more efficiently. For multipart packages and diverse editing flexibility, **Adobe Photoshop**, or **Corel Paint Shop Pro** are mostly used.



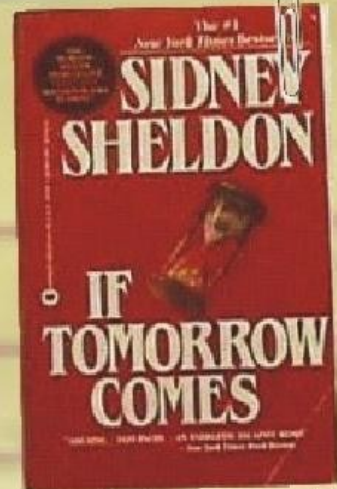
### Bibliography

<http://digitalphotography.tipcentral.net/choosingacamera.html>  
<http://www.wfu.edu/~matthews/misc/DigPhotog/start/software.html>

# Student Scraps

## If tomorrow comes (Review)

"If tomorrow comes" is the novel written by Sidney Sheldon. I personally like Sidney Sheldon the most so I chose his novel to write a preview on: The novel is a thriller that tells a story of Tracy Whitney, who is on the top of the world, pretty and genius. Her life is perfect until she falls a victim to the rich and powerful mafia and their unfair plays. She is accused of murder attempt and theft and is sentenced twenty-four years of imprisonment. She loses her job and the only man she ever loved. Her life in jail is a nightmare. She is abused and mistreated by the women there and soon she realizes that life won't play fair to her unless she learns to stand on her feet and thrive for it herself. She struggles and wades through all the troubles until finally one day she is released before the sentence is completed for saving warden's child. Her life outside is no better than her life in jail. Her fiancé has married another woman and her boss refuses to re-employ her in his office, in fact nobody is ready to give her a decent job due to her criminal record. Upset and anguished, she decides to teach a lesson to those people who build their empires on the lives of poor and innocent people like her. She starts planning the best laid out robbery plans. From Spain to Rome, she plays the highest stakes and within no time, all the intelligence agencies of the world are on their feet searching for her. She is smart, ambitious and fearless and so she becomes the most wanted con artist in the world. Jeff Stevens, another equally intelligent and ambitious con artist crosses her path and together they play the most dangerous games the world has witnessed. I thoroughly enjoyed this novel. The situations created in it drives a person to the edge, though the story slows down its pace where the writer narrates her life in jail but rest of the novel is full of fun, intrigue and suspense.



By: Aishma Shahid  
6th semester  
Chemical Dept

## Awakening the Soul

Oh man! Be brave, be brave.....!  
Understand your life before entering the grave;  
The noise piercing your soul,  
Needs your unit to show worth as a whole;  
Don't jump your emotions, let them grow,  
They will seep in you, lift your head from the bow;  
Dry eyes reflect you from inside,  
Make them saturated with the dream's tide;  
Oh man! Change attitude to polish aptitude,  
It will enhance your strength's magnitude;  
Show the sky your height, you're your sight,  
So that the world know your might;  
Unless you learn how to ride,  
You can't lead towards the right;  
Make your way clear from hay,  
Enter the trouble, not to stray;  
Oh man! be brave, be brave...!  
Understand your life before entering the grave;...

By: Rimla Bashir  
2nd semester  
Electrical Dept

# GROUP WALL

**SARA NASIR:**  
ALL NIGHT STUDIES, CALLS, GOSSIPS  
AND THEN CLASSES AT 8:00AM....WHAT  
YOU DO....?

**TAHIRA GUL**  
ITS REALLY HARD TO SIT IN THE CLASS  
AT 8:00AM...OOOOPPSS...GETTING  
JERKS AFTER EVERY TWO THREE SEC-  
ONDS....FEELING LIKE I COULD HAVE  
NEVER SUCH A CHANCE OF SOUND  
SLEEP AGAIN.....

**SIDRAH YOUSAF**  
AND WHEN WE OPEN OUR EYES AFTER  
TWENTY SECONDS SLEEP, WE FIND  
TEACHER LOOKING AT US...OHH SO  
EMBARRASSING MOMENT  
WHILE NOTING DOWN THE LECTURE,  
WORDS BOUNCE UP AND DOWN...  
SOMETIMES VERY LARGE AND SOME-  
TIMES VERY SMALL....:)

**ZAKIR KHAN**  
IMAGINE YOU ARE IN A SINKING  
BOAT AND SURROUNDED BY  
SHARKS. HOW DO YOU SURVIVE?

**USMAN SALIM**  
STOP IMAGINING!!.....THAT'S IT!

**HAVE YOUR SAY!!!**  
WHY TEACHERS GIVE US ASSIGNMENTS WHEN  
THEY KNOW THAT WE COPY THEM?

**GUSSAN MUFTI**  
THEY WANT US TO IMPROVE OUR HANDWRITING...  
**UXI DESIRED(UZAIR SIDDIQUE)**  
THEY WANT TO KNOW THE COPYING SKILLS OF US ,  
THAT TO HOW MUCH PEEK WE CAN COPY , THEN  
THEY MAKE PAPER ACCORDING TO THAT .. !!  
LIKE THEY MAKE A PAPER, IN WHICH MOST OF  
THE QUESTIONS ARE VERY DIFFICULT TO  
COPY ....P



**GUESS WHAT IS INSIDE...?**

**XADDAM KHAN**  
I KNOW....I KNOW...SIR TAHIR ATIQ PLACES  
HIS SECRET LOTTERY BOX OUT THERE...  
WHICH HE USES DURING VIVAS....HEHEHEHE

**XAD KHAN**  
PERFORM THE FOLLOWING EXPERIMENT...  
ENGG: MECHANICS (STATICS)  
LAW OF PENTAGON OF FORCES...  
CONDITIONS: IN FRONT OF PEDESTAL FAN...  
ACCURACY : 100%  
**NUMAN KHURSHID ITS SIMPLE...**  
JST USE STEEL WIRES TO HANG THE LOAD....:P OR COPY IT FROM THE  
TOPPER....:)

**UNIVERSITY OF OUR DREAMS BY XADDAM KHAN**

1) ERRR....I DON'T LIKE THE NAME  
"UNIVERSITY OF ENGINEERING AND TECHNOL-  
OGY" AT ALL.....IT SHOULD BE UNIVERSITY  
FOR ENJOYING TECHNOLOGY

2) IT SHOULD BE ADJACENT TO JHEEL SAIFUL MALUK,  
PAKISTAN (AS OUR COUNTRY IS THE REGION OF POSSI-  
BILITIES...SO IT SHOULD BE STILL IN PAKISTAN).

3) ONLY COPIED ASSIGNMENTS SHOULD BE CON-  
SIDERED....ERRR...TEAM WORK DOES MATTERS...!

4) TEACHER SHOULD NOT DARE TO TEACH ANY-  
THING WITHOUT THE PROPER CONSENT OF STU-  
DENT....OTHERWISE HE WILL BE PENALIZED.

5) THERE SHOULD BE A LAB (COMPULSORY FOR ALL  
THE DEPARTMENTS WITH 4 CREDIT HOURS)...NAMED AS  
"ATTESTATION, SIGNATURE.& STAMPING LAB"...AFTER  
ALL WE ARE GONNA BE BPS17 OFFICERS!!!

6) BOOK WORMS SHOULD BE DELETED IMMEDIATELY FROM THE UNIVERSITY, IF SEEN ANYWHERE  
IN UNIVERSITY PREMISES. AS THESE WORMS REPLICATE THEMSELVES HENCE SLOWING DOWN THE  
UNIVERSITY PERFORMANCE...AND WE WILL NOT LET OUR UNIVERSITY GET SLOW DOWN!!!



## VETIANS WORKING



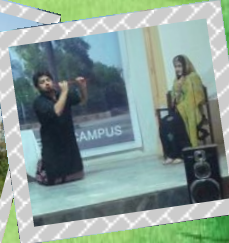
## OUTSIDE THE CLASSES

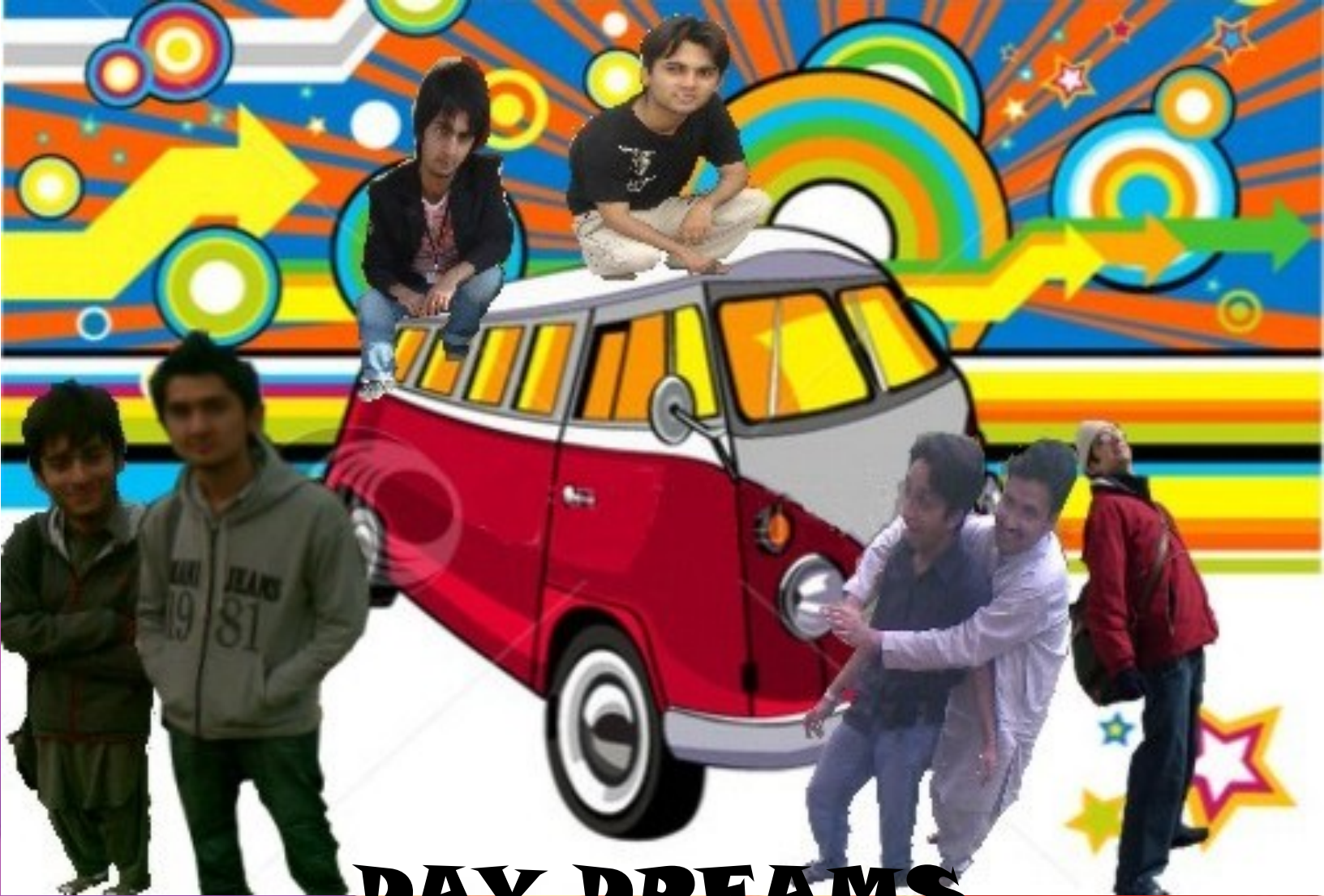


## BUS STOP

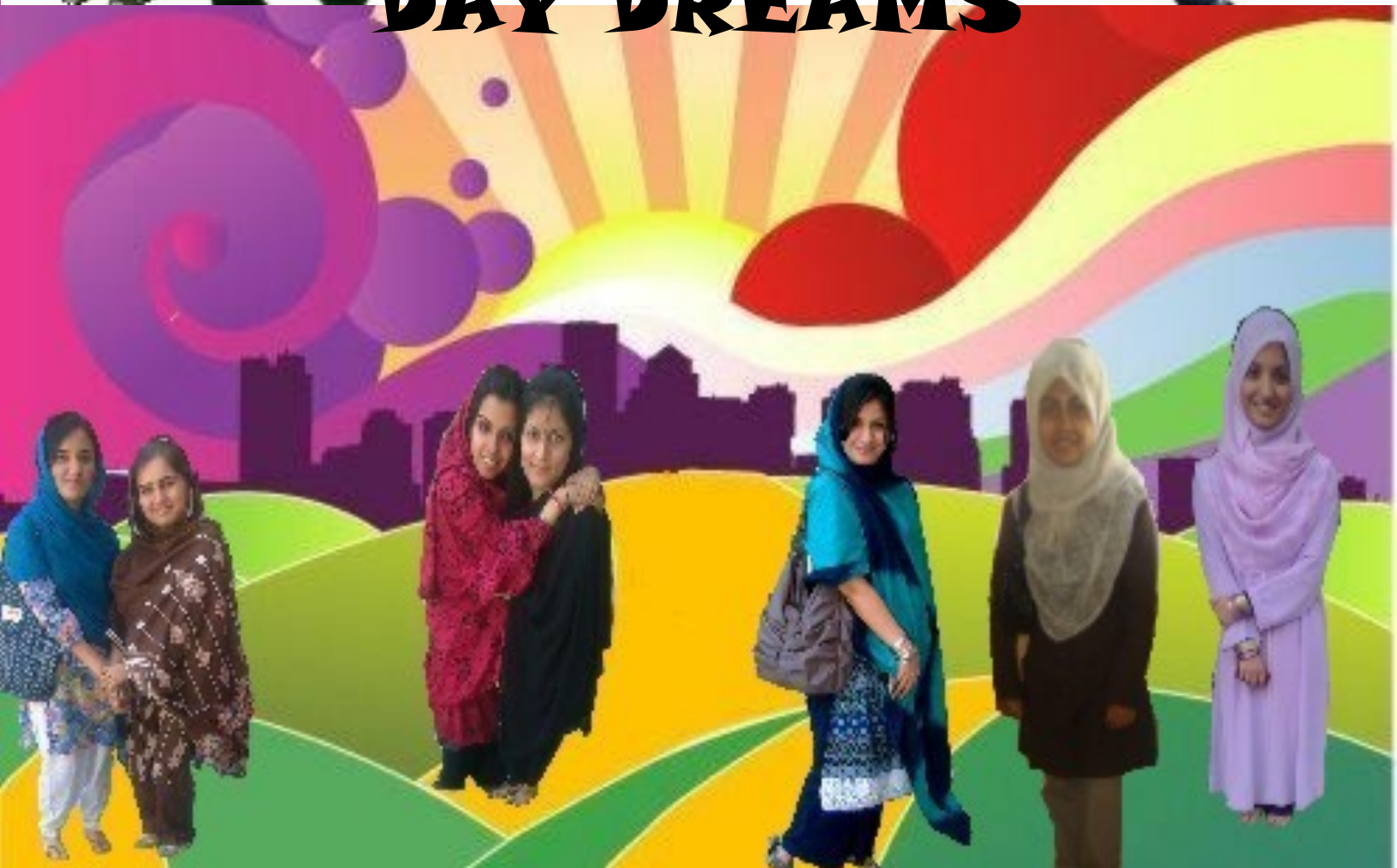


## ABBOTTABAD CAMPUS





# DAY DREAMS



# MEMORIES IN LIFE PHOTOGRAPHY



# Behind The Boundaries



## UET Lahore

**Vacuumatic, project of CSE 06 won the first prize in Hardware & Electronics Project Competition held at NFC-IEFR.**

Vacuumatic, project of CSE 06 won the first prize in Hardware & Electronics Project Competition held at NFC-IEFR (Institute of Engineering & Fertilizer Research) under the

IEEE chapter of the institute.

**Project Supervisor:** Mr. Asim Rehmat

**Team:** Arfeen Khalid (Team Lead), Amna Mukhtar, Fakiha Iram, Hiba Shahid

**Brief Description:** Vacuumatic is a robot for cleaning carpeted floors automatically without human intervention thus saving valuable time and energy of a

person. Vacuumatic is a blessing for the handicapped persons with which they can enjoy the cleanliness of its place at the same level as a normal person does. It is a non-harmful type of robot which automatically avoids all the hurdles through sensory devices on its way to clean the room. It is a unique and intelligent robot which will manage whole house.

## GIKI, Topi

The Media Fest '10 was held from 26th - 28th February. It was a highly anticipated event and saw a great number of participants from all over the country. The event saw participants battling it out in the following six categories: Animation design, Poster Design competition, Short Film

Competition, Photo-Essay competition, On spot Photography competition, On spot Short Commercial competition.

In the short films category the winners were Riphah International Institute of Media Sciences for their video titled "Bab-e-Jannat". In the poster design category, Air Uni-

versity emerged victorious. Best animation went to "IMS-Peshawar". In the short commercial category top prize was bagged by the Riphah International Institute of Media Sciences.

For details

<http://www.giki.edu.pk/controlpanel/viewnews.php?id=28>

## NUST Islamabad

Dr Junaid Khan; 1st Pakistani faculty member to teach PhD Scholars of China.

Name: Dr Muhammad Junaid Khan  
Institution where studied: Tsinghua University Beijing, China

Degree Completed: PhD Engineering Sciences

Commodore Dr Muhammad Junaid Khan, Assistant Professor National University of Science and Technology Rawalpindi earned the honour of becoming first Faculty Member from Pakistan to teach the PhD level students of top Chinese Universities such as Tsinghua University, Beijing Institute of

Technology, Chinese Academy of Sciences, Chinese Academy of Telecommunication and Technology, Huazhong University of Science and Technology and Xian Jiaotong University.

For details:

<http://www.hec.gov.pk/InsideHEC/Divisions/HRD/Scholarships/Stories/Pages/MJunaidkhan.aspx>

## UPDATES

- **UET Taxila girls won "best performance sports trophy" at Fatima Jinnah Women University Rawalpindi.**

Fatima Jinnah Women University organized Women Week From 2nd to 4th of April. Girl students of UET Taxila participated in all Sports Events which Included Volley Ball, Cricket, Badminton. They

1. Got 1st Position in Volley Ball.
2. Got 1st in Cricket.
3. 2nd Position in Badminton
4. Over all Brilliant Performance Trophy

- **NED University is arranging Third International Symposium on Infrastructure Engineering in Developing Countries (IEDC-2010) and 1st International Conference on Sustainable Transportation & Traffic Management, Karachi, Pakistan.(July 1-3, 2010)**  
For details:

<http://www.neduet.edu.pk/UE/IEDC-2010/Home.html>

- **CIIT Lahore Wins Speed Programming Competition TechnoMoot2010-VisionICT held at CIIT Abbottabad**

- **International Islamic University, Islamabad is celebrating its Silver Jubilee (1985-2010) this year. As a part of these celebrations, Faculty of Engineering and Technology is organizing its "First Open House" in the Department of Electronics Engineering on 19 and 20 May, 2010. This "Open House" activity will include display and demonstration of R&D projects of final year students, faculty-developed devices, exhibition of electronic industrial products, and tour to research laboratories of Electronic Engineering Department.**  
For details:

[http://www.iiu.edu.pk/News/may\\_10.html#fet](http://www.iiu.edu.pk/News/may_10.html#fet)



# SCHOLARSHIPS

## Endeavour Awards:

The Endeavour Awards is the Australian Government's internationally competitive, merit-based scholarship program providing opportunities for citizens of the Asia-Pacific, Middle East, Europe and Americas to undertake study, research and professional development in Australia. Awards are also available for Australians to undertake study, research and professional development abroad.

The Endeavour Awards aim to:

- Develop on-going educational, research and professional linkages between individuals, organizations and countries
- Provide opportunities for high achieving individuals from Australia and overseas to increase their skills and enhance their global awareness

For details:

<http://www.endeavour.deewr.gov.au/>

Award	Study Level	Award Duration	Total Award Value \$AUD	Eligible Applicants
Endeavour Postgraduate Awards	Postgraduate study/ research for an Australian Masters degree or PhD	Up to 2 years for a Masters Up to 3.5 years for a PhD	Up to \$201,000 (PhD) and \$108,500 (Masters)	International applicants only

## Scholarships offered in UET Peshawar:

- Frontier education scholarship
- Orphan scholarship
- Zakat scholarship program
- Dr.Omar Hayat Malik trust scholarship
- Mora scholarship
- Syeda Mubarik Begham scholarship
- NESCOM scholarship
- FATA scholarship
- Foreign students scholarship
- BISE scholarship
- Dr.A.Q.Khan scholarship
- Fuaji foundation scholarship

For Further details contact:

Sir Zahid Mehmood ( Chairman Agriculture Dep) Deputy Registrar

Other Websites:

- <http://www.scholars4dev.com/>
- <http://www.pkstudents.com/>
- <http://www.moe.gov.pk/scholarships.htm>
- [http://www.pakistanscholarships.com/scholarships\\_by\\_category.aspx?id=15](http://www.pakistanscholarships.com/scholarships_by_category.aspx?id=15)



## JOBS

### PHP Developers

Pakistan, Rawalpindi | Hillcrest Solutions (Pvt.) Ltd.

Related Experience:

Fresh

Job status: Contract

Posted Date: 2010-06-14

Information Technologies (IT) / Software Jobs

### Graphic Designer

Pakistan, Rawalpindi | Yuztech

Related Experience: Less than 1 Years

Job status: Full time

Age: 21-30 Year

Minimum Education: Doesn't Matter

Career Level: Not Required

Posted Date: 2010-06-14

### Software

**Website Developer**, Corporate

Communications- Sulem

Pakistan, Lahore |

(LUMS)

Related Experience: 3 to 4 Years

Job status: Permanent

Minimum Education: Bachelor of Computer

Science

Career Level:

Experienced

Posted Date: 2010-06-14

### Computer Operator

Pakistan, Lahore | Alternate Gear Pvt. Ltd.

Related Experience: Fresh

Job status: Full time

Posted Date: 2010-06-14

information Technology

gies (IT) / Software Jobs /

### Dot Net Developer

Pakistan, Lahore | Technology Software Associates (Pvt) Ltd

Related Experience: 1 to 2 Years

Job status: Full time

Posted Date: 2010-06-14

Information Technologies (IT) / Software Jobs

Find jobs of your interest through these websites:

- <http://www.rozee.pk/>
- <http://paperpk.com/blog/>
- <http://www.brightspyre.com/opening/bsjobs.php>
- <http://pk.theengineeringjob.com>

Never continue in a job you don't enjoy. If you're happy in what you're doing, you'll like yourself, you'll have inner peace. And if you have that, along with physical health, you'll have more success than you could possibly have imagined.



Ford Foundation

## Ford Foundation International Fellowships Program (IFP): Cairo

**Description:** The International Fellowships Program (IFP), which AM-IDEAST administers in Egypt and Palestine, provides a select number of exceptional students with the financial support necessary to pursue up to three years of graduate study at any college or university in the world. The program attracts students from diverse backgrounds but is targeted toward individuals from communities that routinely lack access to higher education. IFP seeks to instill within these future leaders the skills and knowledge needed to improve social and economic conditions within their communities. In addition to providing financial assistance for travel, living expenses and tuition, IFP also offers preliminary pre-academic training including language instruction, workshops on research skills, and computer training.

### Academic Level:

- Bachelors
- Masters

### Field(s) of Study:

- Electronics
- Engineering
- Engineering (Chemical)
- Engineering (Civil)
- Engineering (Computer)
- Engineering (Electrical)
- Engineering (Mechanical)

**Amount:** financial support necessary to pursue up to three years of graduate study at any college or university in the world.

**No. of Scholarship Recipients:** varies

For details:

<http://scholarships.goabroad.com/listingsp3.cfm/listing/2237>