

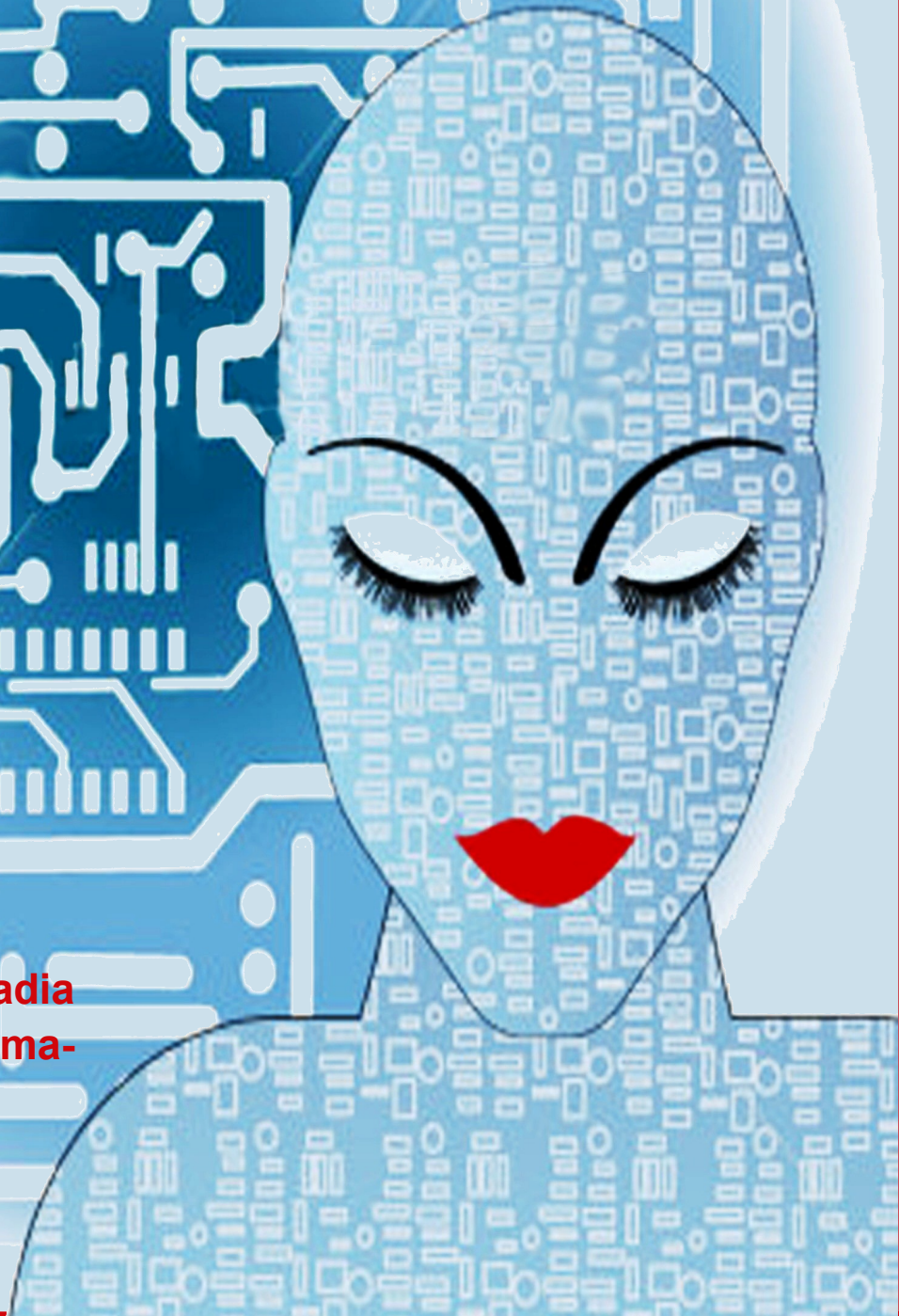
PAKISTAN WOMEN IN ENGINEERING NEWSLETTER

Summer Volume 2012



**Lahore Section Establishes
WIE Affinity Group**

**Exclusive interview with Sadia
Kazmi, Head of Industry Automa-
tion, Siemens Pakistan.**



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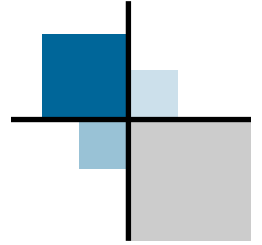
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Jauwairia Nasir and Fahad Islam with their Robot

Abstract of the Paper

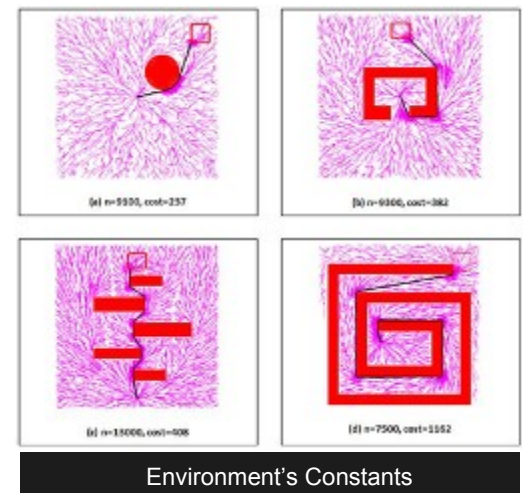
"Rapidly Exploring Random Tree (RRT) is one of the quickest and the most efficient obstacle free path finding algorithm. However, it cannot guarantee finding the most optimal path. A recently proposed extension of RRT, known as Rapidly Exploring Random Tree Star (RRT*), claims to achieve convergence towards the optimal solution but has been proven to take an infinite time to do so and with a slow convergence rate. To overcome these limitations, we propose an extension of RRT*, called RRT*-Smart, which aims to accelerate its rate of convergence and to reach an optimum or near optimum solution at a much faster rate and at a reduced execution time. Our novel algorithm inculcates two new techniques in RRT*: these are path optimization and intelligent sampling. Simulation results presented in various obstacle cluttered environments confirm the efficiency of RRT*-Smart.

Rapidly Exploring Random Tree Star (RRT*) - Smart

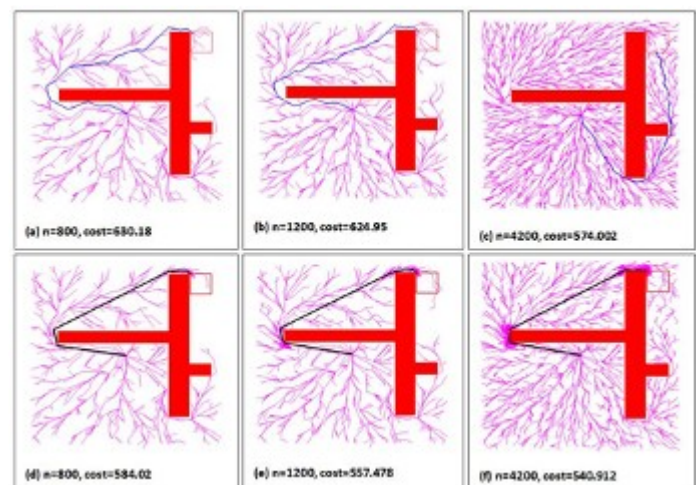
Motion planning is a field of Artificial Intelligence in which a mobile robot autonomously reaches its destination by finding the most optimum path avoiding obstacles. In 2010, an algorithm known as RRT* algorithm was developed by two researchers from MIT; Sertec Karaman and Emilio Frazzoli for smooth motion of the machine. This has been a very popular motion planning algorithm since then because of its advantages over other algorithms.

Until recently when a paper of two undergraduate students from NUST School of Electrical Engineering and Computer Sciences, Jauwairia Nasir and Fahad Islam got accepted at IEEE RAS sponsored International Conference on Mechatronics and Automation 2012, China. In this paper, they presented a novel motion planning algorithm "RRT*-Smart" based on a latest algorithm RRT*. They developed this algorithm during their Final Year Project titled "Motion Planning and Navigation of Mobile Robots". Optimizing such an algorithm and reaching at far better results in terms of time and cost is a big achievement. The implementation of the algorithm is in C++ language with graphical and animation results on OpenGL and the simulation results on dedicated robotic navigation software known as Player-Stage. This all has been done on an integrated platform Eclipse and using OpenCV libraries as well. To practically demonstrate their Motion Planning results and to give proof of concept, they also tested them on Pioneer 3-AT Mobile Robot which is a skid steer four wheel robotic platform used for latest cutting edge robotic research.

The Figure shows the optimized path planned by RRT*-Smart in different obstacle environments. The red box is the goal region; the solid red color represents the obstacles while the black line represents the path found from the start region. The number of iteration at which the optimized cost is achieved is mentioned in the captions.



Environment's Constants



Quad Rotor Helicopter

Amna Ziauddin along with Saad ur Rehman Faiz, Capt. Rashid Mansur and Capt. Umar Khalid build Aba-beel UAV; a quad rotor helicopter, which is equipped with mine detection and video transmission capabilities, to allow for remote detection and tagging/detonation of metal mines. This project was designed to provide a better, safer and more efficient method of clearing land mines. In addition, the project can help in humanitarian efforts in wake of natural disaster and to help law enforcement agencies (LEA). The project also finds application in surveying and security applications.



Digital Baseband Processing Module

NC Bakhtawar Hasan, NC Nabila Shahid and NC Rabeea Suhail have indigenously performed the hardware designing of a Digital Baseband Processing Module in order to reduce foreign reliance for such expensive equipment, and have developed it by mapping it onto Virtex 5 FPGA. The implementation of the Wide Band Networking Waveform for SDR has been carried out using the OFDM model according to IEEE 802.11a standard. The Baseband Processing Module's performance has been tested and results have been analyzed by successfully transmitting live audio signal.



Female Engineers taking the Lead

I recently happened to revive an episode of the famous TV Sitcom "Friends" where two of the characters hired a male nanny for their child. Apparently it seemed a taboo (a man being a nanny; a big deal) and every male character responded with the same sentence: "Woah! It's like a woman wants to be a..." But the sentence was never completed because there isn't any field where women have failed to prove their skills and abilities. It is, however, still considered that women are lagging behind in the field of mathematics and engineering. Although their enrollment in Engineering Colleges has been more than ever, they are still considered a minority. But women are contributing towards science and technology as much as their counterparts. They are competent enough to propose and execute tough and challenging projects even more eagerly. As a matter of fact, in Military College of Signals - NUST, Rawalpindi the projects of female students have not only outnumbered the projects by male students but also overshadowed them.

CRRIT stands for crime reporting, response and investigation tools. Maham Shabbir developed a Crime reporting, response generation and investigation system via web, android and Symbian cell phones using ASP.net, Java and Microsoft SQL server 2008. It provides an easy way to report the crimes. Crime report can be sent by all mobile users using GSM functionality. Also these users include Web, Smartphone users and Symbian cell phone users. It reports the suspicious activity speedily and generates a solid response within less time.

Summaya & Shajiah developed a Mobile VoIP (voice over internet) with the purpose to design and develop a software system for Android mobile phone that allows users to call other users over the internet. This project provides a sip phone for android mobile that provides user the facility of calling other users via internet. Contact list is provided so user can easily call other mobile users. It also provides the functionality of inbox and sending messages to other users and adding contacts in the list.

Alongside with the brilliant achievements in the software section, women are behind no one while contributing for the hardware projects. Amal Atique, Javeriah Khalid, Rabya Mahmood and Ahmed build a "Centralized Environmental Network Monitoring and Reporting System" based monitoring and reporting system for Telecom operators which they are calling CENMaRS. CENMaRS monitors the environmental changes in an unmanned site for centralized management through comprehensive database & reporting system. Sensors at remote sites/locations are connected to the controller which sends the raw data to the server over the Intranet. The comprehensive database is maintained at the server end. The processed and filtered data is displayed using a Graphical User Interface GUI.

Gone are those days when women were considered a feeble gender. They are contributing equally for the development and betterment of the world giving a tough time to anyone who is trying to finish the sentence. And to give in my contribution, I would say: "It's like a woman wants to sit at home & do nothing :)"



Amal Atique, Javeriah Khalid, Rabya Mahmood and Ahmed of MCS NUST

Ms Sadia Mansoor Kazmi works as the Manager Sales and Automation at Siemens Pakistan. Though Automation being her core field, she is the Head of Proposals handling both local and international project sales as well as the Quality Manager for the Industry Automation Division of Siemens. She joined Siemens as a student, 20 years ago.



Representatives of Pakistan WIE Forum, Ms Rabia Khalid along with Ms Rehma Javed, Secretary IEEE PNEC visited Siemens Karachi to interview Ms. Sadia Kazmi. During this one hour meeting they asked her a few questions regarding her work, how she manages and what did it take her to reach up to this level. A few questions that were asked are mentioned here.

What is the most challenging aspect of your position and why?

The most challenging aspect of my position right now is to be well versed in all aspects of proposal making other than technical for example the financial and legal terminology being used in Siemens Processes for proposal making. The Technical part seems to be the easy part for me. Closing a deal over the email/telephone is also quite a challenging activity as I have very limited travel options. When I was in engineering/execution there the most challenging part was commissioning on site. Not because of the technical aspect but because of the facilities available to women on remote project sites.

What is the key to balance your personal and professional life?

You should know where your priorities lie and make your choices accordingly. Initially career was my priority and I gave my full sometimes even 24/7 to work. Now my family is my priority.

Over the years I have refused many career opportunities with increased financial benefits because it meant taking out more of my time and stretching my limits and I wouldn't be able to justify my responsibilities to my family and work together. I am lucky to work in a company that has flexible timing and a facility to work from home, which I avail and make the best of my time. Other than that the most important aspect is the cooperation of my family with me which helps me do the balancing well.

What's the most important thing you expect from colleagues and staff?

Respect.

Has anyone inspired you so far? Why & How?

When I joined Siemens, there was an extremely knowledgeable Lady, Ms. Roshnak. She was very meticulous, punctual and straightforward. She was so sound technically that most of the colleagues even senior one would take her word as the last. She was known for her technical knowledge.

Have you ever experienced any stigmas or biases against you because of being a working woman?

Yes, definitely. You meet all sorts of people throughout your career. I have done a lot of hard work to get to this position. And yet at times, I find that people do not like to recognize your worth. When it comes to dividing work within a group, you (being a woman) are not given work or the work given to you is not worth anything. Also instead of being given technical work, you are assigned with presentations or documentation.

Also in the professional field sometimes customers would not want to talk to a female about the technicalities of a project. Some Industrial plants do not allow females to visit.

Another bias worth mentioning is that most people think that as it is not the duty of the woman to support the family, therefore she does not need to be paid the same as a male counterpart.



Rabia Khalid, Chairperson Pakistan WIE Forum & Rehma Javed, Secretary IEEE PNEC with Ms Sadia Kazmi at Siemens Karachi.

Much better. You see the main issue for a

In this male dominated society, how do you see the future of working women?

female is having kids; it is not easy to leave them at home. But nowadays facilities do exist that were not available way back then like daycares, pampers, KN's etc.

Another factor that is changing is acceptance. Mental level of people has improved as people are sending their own daughters to engineering universities. I find that customers now are more willing to discuss a project with a woman and are not as reluctant as before.

Where do you see yourself after four years?

I'll still be working. Reason I have struggled until today is that I enjoy my work, even though it got extremely grinding when my children were young. I see myself as working in the next few years. If I am not at Siemens at that time, I might pursue teaching. Contrary to many people I am fond of teaching and look forward to it as a career choice.



WIE NED Team at PTV Station Karachi

NED-UET WIE TEAM PROMOTES WOMEN LIVE ON TV

With this venture to the studios and offices of PTV, IEEE-Women in Engineering NED UET optimistically expected to reach out to the community and to motivate women to embark upon engineering professions and envision scientific and technical studies. The dedicated members of the student body of WIE-NEDUET will carry the work of their predecessors and contemporaries to help women develop skills, and self confidence and to be able to compete with the rest of the world in all walks of life.

We live in the part of the world where women suffer extreme oppression by the superior sex. To support women empowerment and to uplift the mission IEEE-WIE, that is to encourage women to pursue engineering careers and to opt into technical and scientific education, the student body of WIE-NED UET arranged for a field trip to Pakistan Television Cooperation on 7th March, 2012. The visit was organized so as to meet the commemoration and celebrations of Women's Day. The aim of this small scale visit to television broadcasting cooperation was to promote the presence of women in technical fields and to encourage the young girls studying in engineering disciplines a chance to explore the practical world which could be their prospect career.

Amongst the student body of WIE-NEDUET were Wahaba Hussain (Chairperson), Ayesha Shoaib (Vice Chair), Kanwal Nafees (Treasurer), Umer Mumtaz (Media and Publication Head) and Saha Nafees (Documentation Coordinator). The trip included the survey of assortment of departments of PTV like Master Control Room (MCR), Video Transmission Room (VTR), Transmitter Room, Satellite and MCP Room, Design Section, Camera Department, Studio Engineering Department, Creative Department and Presentation Department. Here the representatives also observed the hotlines which were used for the direct contact from the studios to the director sitting in the panel. Additionally, the representatives were also led to examine various machines that included linear editing machine, non-linear editing machine, beta VCR, XD camp VCR and Computer Graphic and Operational Machine. The encouraging staff also pushed the students to operate some of the machinery on their own which gave a boost to the female members of the committee.

The Chairperson and Treasurers gave interviews to the National Television. The Chairperson verified her stance and mission by stating, "As an engineer in making and a part of the IEEE-WIE community, I deem to promote the status of women in all spheres of life." Kanwal Nafees, the treasurer, emphasized the importance of engineering by saying, "It's not about math or getting your hands dirty- It's about experiments from which we learn."

**Report by
Wahaba Hussain
Chair WIE NED**

Women`s Day Celebration – IEEE WIE NFC-IEFR

“Every great dream begins with a dreamer. Always remember, you have within you the strength, the patience, and the passion to reach for the stars to change the world.”

On March 8, 2012 WIE NFC-IEFR student branch organized a grand event in order to pay tribute to the great women in Pakistan. The main motive was actually to show how strong a Woman can be and how she can prove her existence in this society so that's why, our theme was “MAI HUN MAI BHE HUN”. A panel discussion was held where the panelists were Ms. Saleha Saeed Deputy Health Secretary Punjab, Naveeda Zia President Sarsabz Foundation and Humaira Ejaz RJ FM-90. The panel discussion was conducted by Saira Anjum, Secretary WIE NFC-IE&FR.



Attendees listening to Humaira Ejaz

After this, a few activities were conducted including a video Competition, Photo Essay Competition, Tech Quiz Competition. A short skit was also presented along with a few inspirational videos.



Asma Adeel presenting memento to Saleha Saeed

The WIE team gave special tribute to Ms. Saleha Saeed who had recently achieved 3rd position in CSS. Saleha, speaking to the audience, mentioned her achievements and the hard work that has been paying her off. Young female students were impressed by her and her presence motivated our students to work hard and never quit just because they are women. Humaira Ejaz who is serving as RJ FM-90 shared her experiences with the young female engineers.

Humaira

conducts the show “5 Baje Band Baje” on FM-90. At the closing of this event the Mentor of the WIE Committee, Ms. Neelam was invited on stage to address the audience. She mentioned the hard work of her whole team in her speech and congratulated them on the success of this event. Mementos were presented to the panelists and the prizes and the participation certificates were given to all the winners and the participants.



WIE Team with the guests

**Report by
Rabail Raza
SSR Lahore Section**

WIE Women Entrepreneurship Conference'12

UIT Karachi

Yasmeen Zafar, the Marketing Chairperson also spoke in the motivation session and said that women are responsible to maintain the generation. They need independence to build their own identity. The families should support women entrepreneurs.

Dr. Rubina Ghani said that women are effective leaders. They must know their own strength that what they can do and want to do? They must create their vision and be optimistic. There is no requirement to become hopeless. They must learn from failure and take initiative to become an excellent communicator.

The first ever WIE Women Entrepreneurship Conference'12 in Pakistan was held on Saturday, May 26, 2012, at UIT, Karachi, by the outgoing final year students of the Usman Institute of technology in collaboration with Engineering & Industrial Review (EIR), a large number of participants attended the event which showed it to be one of the most successful event held during recent days, especially to its relevancy.

The conference began with the recitation of Holy Quran. Speakers at the sessions were Rohana Iqbal, Sadia Naz, Sumrah Ahmed, Dr. Rubina Ghani, Rubina Iqbal, Lubna Namazi, Kashif Qureshi, Fahim Ahmed, Dr. Salima Ahmed, Rabia Khalid and Dr. Shireen Khanzada. Aisha Ambreen Ansari, Chairperson IEEE WIE UIT welcomed the audience and told them that WIE at UIT was established to inspire, promote and empower women entrepreneurs and we are working for their rights to settle their lives. She also highlighted that women empowerment has been increasing rapidly day by day throughout the world and we are also striving at our best to engage the women to start their own business. In her address, she thanked the sponsors of the event namely Indus Cables, Pioneer Cables, Jubilee Corporation, Tariq Automation, Libra Engineering, Bright Sky Valves, Engineering & Industrial Review, Agri Auto Industries and Karimi Electromech Systems. After this, Branch Counselor IEEE UIT Engr Parkash Lohana, Director UIT Waseem Akhtar, Chairman Executive Board of UIT Dr. Manzoor Ahmed addressed the audience and appreciate the efforts of WIE for making this conference a success.

The awareness session was started by a social personality Dr. Anila Malik. She teaches



in the department of Psychology in Karachi University. She told that we can't ignore the importance of women. She gives the examples of various famous social workers. She reiterated that we have traditional mind set and we have to change it by our policies.



The women are restricted to remain at home so there is a requirement to empower women. Comprehensive steps are required to uplift the women entrepreneurs in Pakistan. Training, support and micro-finance loan should be provided to raise women status so that they can make a start for their business, like textile design unit or cottage industries.

Dr. Keshwar Zehra an activists and MNA of Muttahida Qaumi Movement was the Chief Guest of the inaugural session. She is working in SIUT Hospital and busy in training the new generation. In her speech she told that this is a male dominated society but God has gifted women the ability to create. If women learn time management then she can be able to do beyond horizon. She told that strength and time management are the two basic key of success for women. Women must share knowledge and wisdom to each others.

Begum Salma Ahmed, Vice President of The Federation of Pakistan Chambers of Commerce & Industry (FPCCI), and a well known industrialist of the time when women were not given any importance in business stood side by side with the men and proved her ability, was the chief guest at the closing session of the event. She heads the office of Pakistan Association of Women Entrepreneur. She said in her concluding session speech that decision making; self-confidence is actually the most measure for empowerment.

She further said that if you become failure then don't be disappointed. Women must have the knowledge of laws to empower herself. Society must also work for women to freed women from all sorts of problems. At the end shield was presented to the speakers and certificates were also given out to the WIE organizing team and in her concluding remarks, Syeda Hafsa Asif, Vice Chair-Person-IEEE WIE UIT thanked all her team members, participants, collaborator and sponsors for making this event a great success.

Along with the other speakers, Ms. Rabia Khalid, Chairperson IEEE Pakistan WIE Forum spoke about "Women's ways of leadership." By giving the examples of Marissa Mayer, Sheryl Sandberg, Oprah Winfrey, she explained the audience about how females are different from their male coworkers as a team member and as a leader. She highlighted the different qualities of the females which make them effective and successful leaders.



Report by
Maria Mumtaz Rana
Secretary WIE UIT

Scrap to Gadget — WIE PNEC

A total of 14 teams participated in the event with 3 members each. Contestants included Engineers-to-be, some new-bees and others graduation right around the corner. A panel of three respectable judges, from varying fields came to decide the winner. The points were given on five criteria, innovations, neatness of work, aesthetics of the work, durability of the design and how pragmatic was the design. Judges questioned each team on their plan of execution and how they had entertained all facets of competition.

WIE-IEEE PNEC organized its first Scrap to Gadget, coined as 180 Degrees, on 18th May 2012. The basic objective was to reproduce a given object with available materials. While some participants came to challenge their creative skills, others came for the sake of 3D Avengers ticket on stake.

Each team was given a picture of a tractor and the challenge was to build a 3D model of the tractor. Available material included paper, cardboard, straw, paper cups, glue and other objects merely for dis-



The competition proceeding with the participants working on their models

traction! The show started at 12 o'clock and the timer was set for 45 minutes. There was whole lot of excitement and commotion as participants rushed passed each other to scavenge the required materials.

As the timer struck 0, many were satisfied with their outcome. The scores had to be totaled and check multiple times as the winning margin was so narrow. It was Mr. Cheema Rana and his teammates who were declared winners at the end. Not everyone got to see Avengers 3D but all those who participated had an amazing time!



Finals touch being given to their model by the participants



The winning tractor!

Report by
Rehma Javed
Secretary IEEE PNEC

Brainiac – IEEE WIE UET Lahore

Colors are the charm and perfection of life. Imagine a world without colors and try to compare it with the real one. No comparison allows a colorless world to look better. Drawing the objects and the symbols is one of the most basic and attractive languages in communication history. Painting, drawing, sketching and use of colors have the ability to represent every object, idea either physical or just imaginable. Here, IEEE UET branch presented an event named COLOR THE IDEA to show the beauty of colors, imagination and artistic power of students at Brainiac 2011. Brainiac was launched at the 5th International Conference on Open Source Systems and Technologies (ICOSST-2011). Color the idea was a creative as well as a fun activity. Every student was given the necessary accessories required to make what they were asked to.



Contestants at Color the Idea

Then an idea “THE LIFE YOU HAVE AND THE LIFE YOU WANT” was announced and students were asked to represent it through their drawing skills. 100 minutes were selected as time limit. Students gave their best to achieve what they were asked to. An encouraging piece of work by each art-lover was collected at the end and a team of judges consisting of three professors marked the art work on the basis of their painting skills and perception of idea. The event ended up with a great success which includes the enthusiasm of students, their interest, enjoyment and

a well conducting behavior of participants towards management. The participant who outshined all others was awarded with winning prize money of Rs 5000 and all others were awarded with certificates to appreciate their great work and encourage them towards such activities.

IEEE & WIE UET also organized the “Fight to Convince” seminar there at



The Discussion Round of Fight to Convince

Brainiac. It was one of the hugely appreciated events of Brainiac 2011. This was, undoubtedly, the right place for the people with hunger to express their ideas and opinions to come and ‘fight to convince’ the others. Each team had to consist of two members. The winning team was to be rewarded with Rs. 8000 as the prize money and the runner up with Rs. 5000. The excitement could be seen among the participants before the event started. The participants were given a particular topic to argue about. The format of the competition was for one team to present their viewpoint first in given time and then rest of the teams were given chance to express their opinions.

Afterwards, the teams were free to object others and enforce their own opinion. The competition lasted for two and half hours and in the end, only one team came up with that convincing power that left no resistive option for the others. The winner and runner up were announced and rewarded at the closing ceremony of the Brainiac 2011.

For the closing ceremony of Brainiac 2011 we were honored by the presence of some esteemed personalities. Dr. Aun Abbas, CEO, National ICT R&D Fund, Dr. Tanveer-UI-Haq, CEO, of Witribe and CEO of Techlogix are among the guests that Brainiac closing ceremony fortunate to have. The success of Brainiac is self-evident with the list of elite guests that it had during its closing ceremony. In their closing remarks, all the guests put major emphasis on the importance of R&D and also mentioned the role of UET in bringing forth the personals equipped with strong technical armory and innovative skills. Ceremony was then clinched on a note that such events and conferences should regularly be held for the betterment of R&D and IT sector in Pakistan.

Report by
Bushra Nayab
Chair WIE UET

CV Writing Workshop & Discover WIE Session Bahria University Islamabad

Representing yourself in the job market is the toughest yet the key factor for getting a job. Most of the students have no idea about what to put on the resume let alone how to make a CV. Realizing the importance of educating the students on the topic, IEEE WIE Bahria University Islamabad conducted a CV Writing workshop on Friday, March 16, 2012. Mr. Ameer Hassan was the speaker for the workshop. More than 60 students benefited from the workshop. The session was a great addition to the students' knowledge. It was a fun and interactive session with small on the spot exercises.

The event started with WIE introductory session. Students were informed about the benefits of IEEE WIE. All the necessary and possible questions were tackled effectively in the presentation by WIE chairperson Miss. Rumshaa Yunus. The main agenda of the session also declared as WIE BUI's aim was that "Progress is proportional to contribution and contribution is incomplete without women's share in it." After the presentation Miss. Maryam was invited to share her experience with the students and to enlighten them about Pakistan WIE Forum.

The event ending was marked by presenting shields to Miss. Maryam and Mr. Ameer by the branch counselor Mr. Haroon Rasheed. The event had an awesome feedback by the guests. With this WIE BUI has broken the ice to a sea of event that would soon be revealed by this passing year.

The Chief Guest of the event was HOD EE department Mr. Jehanzeb Ahmed. We were honored by the presence of the General Secretary of PWF; Ms Maryam Saeed, MS in Finance from university of Auckland; Mr. Ameer Hassan as guest speaker for CV writing workshop, Miss. Ishba Shehzad from FAST and Ms Sumbal from NUST.



Maryam Saeed, Ishba Shehzad, Ameer Hassan, Sumbal



The WIE Committee members

At the workshop session the recently established WIE Affinity Group of Bahria University, Islamabad also gave an introductory session on becoming the first university from Islamabad section to become the first one with an active WIE branch.

*Report by
Rumshaa Yunus
Chair WIE BUI*

Pakistan Mission to Progress - Awareness session

Khatoon-e-Pakistan School, Karachi

The Pakistan Mission to Progress Project has been divided into two major phases. This was its phase one where we visited different schools and colleges with the aim to create awareness among the young females regarding the field of engineering. Through these efforts of the Pakistan Mission to Progress Project team, we envision a brighter and better tomorrow where the young female students are well aware of their role in their field of engineering and how they can bring about a change in the world being an engineer.

IEEE-WIE-UIT conducted an awareness session of "WIE Pakistan Mission to Progress" project of IEEE Pakistan Women in Engineering Forum at KHATOON-E-PAKISTAN Government Girls School Karachi. The theme of this session was:

"Rights of the Child and Right to Education." The session was carried out by Aisha Ambreen Ansari Chair WIE UIT, Hafsa Asif Vice Chair and Maria Rana General Secretary. They started off with an introduction about IEEE, IEEE-WIE, and Pakistan WIE Forum



WIE Members of UIT among the students

given by Aisha Ambreen with the aim to increase awareness regarding the field of engineering among the younger generations. They had interactive session with the students of matriculation and above and brief them about the vast field of engineering. Importance of female engineers in the future was also a topic of long debate.

Our main agenda was to teach and educate students about the basic rights of the children and educational rights. We had chose Khatoon-e-Pakistan Gov. Girls School as the students of the school were not well aware of science and technology and the fields of engineering. Hafsa Asif enlightened them about courses of engineering offered in Pakistan and how can they get enrolled for them. The students showed great interest in the field of solar energy. Maria Rana told them about the live projects going on in Pakistan regarding solar energy. The three speakers told the young students about their ongoing final year projects to motivate the listeners and inspire them.



The WIE Team of UIT Karachi

Report by
Aisha Ambreen
Chairperson WIE UIT

WIE in GIKI ~ Why in GIKI?

At Ghulam Ishaq Khan Institute, Topi, it has been observed that the participation of female students is very less as compared to the male students in technical events dealing with technical modules such as Robo Races (including both line tracking and walk hugging), Robo Wars and Race to Innovation. GIKI Electronix Olympiad was the largest of all national events hosted by IEEE GIKI Chapter till date but unfortunately only 20 females participated in the Olympiad out of the total 150 participants.

Awkwardly, the girl: boy ratio is surprisingly low in any technical events. Bearing this in mind the most straight forward and easy way to increase the interest of female students and consequently their participation in such technical events is to widen the scope of these events to include modules such as workshops and seminars dealing with the limitations that the females face, when it comes to

One of the many reasons one should prefer WIE over any other women's society which claims to hold the same code as WIE would be that WIE not only has a fully established and organized hierarchy but also has fully defined and planned objec-



Female students of GIKI participating in various events

their opting for all engineering related occupations so as to provide a proper platform for female representation in the field of engineering.

In order to address these issues, initiative is being taken by IEEE. Although the initiative still being in its initial stages lacks momentum but steps are being taken even as I write this report. IEEE GIKI chapter is hosting this year's Pakistan Student Congress on from September **7 to 9, 2012** and we plan to use this forum to take our initiative to the next level. At the Pakistan Student Congress, the IEEE Pakistan WIE Forum is collaborating with IEEE GIKI and organizing the WIE Congress. We do hope that this congress will not only be a success when it comes to introducing WIE to the GIKI students but also in explaining the benefits and factors that make WIE unique to the fullest extent.

tives. In addition to this WIE is an international chapter that has its roots in many countries all around the world promising maximum exposure resultantly providing solutions to problems new and old.

***Report by
Ahsan Abdullah
Vice Chair Operations
IEEE GIKI***

WIE LAHORE SECTION AFFINITY GROUP

INAUGURAL CEREMONY AT *ESPIRIT DE IEEE*

IEEE Lahore Section is one of the oldest Section in Region 10 with foundation back in 1968. Since then IEEE Lahore section has been performing very well and growing rapidly. IEEE Lahore Section is currently led by visionary Leadership of Dr. Khaver Zia with other executive members. WIE Affinity Groups in the Lahore Section have been performing very actively in over the past few years. Ms. Mehvish Zahoor, along with a few otherwise graduate, petitioned for the formation of WIE Affinity Group Lahore Section and the first executive committee was formed.

The first executive committee members of the WIE Lahore Section Affinity Group are:

Mehvish Zahoor - Chairperson

Anum Javed – Vice Chair

Adila Shauket - General Secretary

Jowaria Sohail – Treasurer

Student Rep - Hafsa Muqadas

Committee members:

Nosheen Irshad

Asma Sajid

Ayesha Fayyaz

Saher Naqi

The motivation behind the formation of IEEE WIE Lahore Section Affinity Group was to provide a platform to all student group branches to coordinate and work together and arrange collaborative events for betterment of WIE. The team is also ambitious to work for the introduction of new Affinity Groups in Lahore Section Student Branches.



Mehvish Zahoor — addressing the audience for the introduction of new Affinity Groups in Lahore Section Student Branches.

Formal inauguration of IEEE Lahore WIE Chapter was done on 28 April, 2012 on joint event named Espirite De IEEE with IEEE Lahore GOLD Affinity Group at University of South Asia. The event was attended by executive committee members of various Student Branches of Lahore Section. Ms. Ammara Ghani, Executive Members IEEE Pakistan WIE Forum was the chief guest. At the occasion, Ms. Mehvish Zahoor presented about the benefits of IEEE & WIE. After the presentation Dr.



The Oath taking Ceremony

Khaver Zia, Chair IEEE Lahore Section took oath from first Executive Committee of IEEE WIE Lahore. Oath ended with prayers for future activities of IEEE WIE Lahore Chapter. At the end of the session a cake cutting ceremony was also held.



The Cake Cutting

Report by
Adia Shaukat
Secretary WIE Lahore Section

IEEE-Bringing Engineering to life! - Membership drive by IEEE and WIE NEDUET

The membership drive for IEEE and IEEE-WIE was held by the student body of NEDUET, on 7th March, 2012. The aim of the event was to inspire and encourage, specially, the female students to be a part of IEEE-WIE community for empowerment of their engineering potential over the globe.

The event started off with an opening recitation and then the sanctified National Anthem. IEEE host threw a welcome address to the attendees with a brief introduction of IEEE and IEEE-WIE. *Rabia Khalid*, Chairperson IEEE Pakistan WIE Forum, spoke about the benefits of IEEE and IEEE-WIE membership and, being a female IEEE member, encouraged the female students to join IEEE-WIE.

Adeel Razi, then spoke some words about IEEE and IEEE-WIE community. Then the Chairman Electronic Department, NEDUET, addressed the session and gave the idea of IEEE and WIE, and appreciated the engagement of students with IEEE and WIE community.

The session attendees were also made involved in small activities to keep their interest towered. IEEE-WIE promotional stuff was given as a gift to the students who took part in the activities. Moreover, the students were also made to fill up the forms to be a part of WIE student body of NEDUET.

Rabia Khalid, Chairperson Pakistan WIE Forum, also explained why is it important to volunteer and to maintain balance between your grades and co-curricular activities. She also told the students about various volunteering opportunities in Global Integrated Network of IEEE, Pakistan Women In Engineering Forum and Graduates Of Last Decade Affinity Group.



Rabia Khalid speaking at the occasion

At the end of the event, Wahaba Hussain, the IEEE-WIE Chair NEDUET, addressed the session and gave the motto of IEEE-WIE. Next to her, Ahsan Saeed, IEEE Chair NEDUET, spoke to the session welcoming the students to IEEE and IEEE-WIE community.



The organizing committee of WIE NEDUET

**Report by
Ahsan Saeed
Chairman IEEE NEDUET**

Membership Drive – WIE IEEE PNEC Student Branch

IEEE PNEC Student Branch held its Membership Drive on 20th April 2012. IEEE PNEC has always made an effort to blend in fun and technology well. This drive was conducted to let the students know of the manifested benefit of joining IEEE and to encourage them to be a part of this society. The one and a half hour session consisted of interactive sessions from Hassaan Idrees – the GINI Representative of Region 10, Ms. Rabia Khalid – Pakistan WIE Forum Chairperson and Student Representative for South Asia Gold Committee, IEEE PNEC and Mr. Onib Nasir – Chairperson, IEEE PNEC.

Hassaan Idrees demonstrated the true benefit of joining IEEE to be an integral part of a family of 400,000+ members. His presentation consisted of ample benefits which included access to one of the world's colossal libraries having more than 2.5 million IEEE documents, having one's own email alias, having an opportunity to interact with people of one's interest from all around the globe. The list goes on.

Mr. Onib Nasir, gave the students a detailed description about the working of IEEE PNEC. He demonstrated the various events held under its banner. His motto was that IEEE PNEC is a well-blended mixture of fun and technology, and the only society of PNEC which tends to do so.

The last speaker, Ms. Rabia Khalid, who has served as the Vice Chair WIE PNEC for the year 2010-2011, Chairperson IEEE for year 2011-2012, and is now the current Chairperson of Pakistan WIE Forum, gave a comprehensive review of Women In Engineering. Being the WIE PNEC Vice Chair herself for the year 2010, she had ample opportunities to portray her skills through this forum. WIE PNEC follows the universal motto of encouraging women towards science and technology. Students, especially girls were encouraged to be a part of this extensive network. Rabia further elaborated the various other opportunities available to the girls by becoming a part of WIE and how to promote women in engineering in this male dominated society. Having been a part of WIE for the previous 3 years, she shared her success story and recounted her experiences and the benefits that WIE has provided to her. The session ended with an interactive game for the audience – the Pictionary. The audience was divided into two teams. One member from each team was given a

word which he had to explain by a drawing. The session was fun and enjoyable. This drive was indeed an effort to create a better and clear vision of IEEE among the students and to encourage them to be a part of this global organization.



The audience engaged in the session and discovering IEEE



Rabia Khalid addressing the audience at the WIE IEEE PNEC Membership Drive and recounting her experiences

**Report by
Iqra Sajid
Vice Chair WIE PNEC**

Women In Engineering Promotional Seminar

IEEE CIIT Student Branch Lahore

Upcoming at IEEE UCET Student Branch

IEEE WIE UCET Student Branch brings you League of ordinary Youth to be Extraordinary. It will be a specialized designed program, focused on:

- Turning to the center: Know yourself
- Before the turn: Vision & goal-setting
- Turning paradigms: Creativity & innovation

Need of Entrepreneurship

This will be a 3 days personal development program where national and international trainers would train you for the above mentioned domains. For more details, please visit:

<https://www.facebook.com/IEEE.UCET.IUB>

A Women In Engineering promotional seminar was conducted to highlight the importance of joining WIE and the benefits that one may avail while being a member of IEEE & WIE. Dr. Sobia Baig, the Branch Counselor, IEEE CIIT delivered a lecture on it and told them how women of Pakistan can play a vital role in the development of Pakistan. IEEE CIIT Lahore also started a campaign to urge students to Join IEEE and WIE Affinity Group. A membership drive was held, in February 2012, for the purpose to attract more and more students towards this global community. To carry on this cause, IEEE CIIT also plans to conduct another session of the WIE Promotional Seminar in the Fall semester this year for the new fresher females students. This second episode of the WIE Promotional Seminar will be organized with the aim to urge young female engineering students to join WIE Affinity Group. Representatives from IEEE WIE Pakistan, Ms Mehvish Zahoor, Chairperson WIE Lahore Section and IEEE Lahore SSR Rabail Raza will be invited to address girls of CIIT Lahore.

Report by
Muhammad Abdullah
Chair IEEE-CIIT, Lahore

CONTRIBUTE TO THE WOMEN IN ENGINEERING MAGAZINE!!

A golden opportunity for the female writers to show their talent is through the upcoming IEEE WIE newsletter. Submissions are being accepted from world over for invaluable contributions of writers. Those who have the apt for molding words into wonders should find this as a wonderful opportunity to step ahead and make a change for further submission details visit:

http://www.ieee.org/membership_services/membership/women/publications/magazine.html

IEEE Women In Engineering Awards Pakistan 2012

All of our volunteers work with their utmost zeal and dedication with the aim of promoting engineering amongst women in Pakistan. IEEE Pakistan WIE Forum has always been blessed with outstanding volunteers who have worked tremendously with keen devotion and allegiance. In order to recognize their efforts, Pakistan WIE Forum has taken the initiative of recognize all their hard work and commitment. Pakistan WIE Forum would be giving out special awards and certificates of recognition. These awards would be announced at the Pakistan Student/ GOLD/ WIE Congress '12.

The categories for the awards are:

- Best WIE Affinity Group Pakistan
- Best WIE Chairperson
- Most Active WIE Volunteer

The nomination forms can be downloaded from <http://sites.ieee.org/pakistan-wie-forum/wie-awards/>

Fill them and submit to ieeewie.pk@gmail.com no longer than **August 20, 2012.**

Pakistan Student/GOLD/WIE Congress 2012

Pakistan Student/GOLD/WIE Congress is an event at national magnitude, that focuses to give Pakistan IEEE, a paraphernalia to widen their network as well an excellent opportunity to the young minds to sit and brainstorm together to bring out something new, innovative and pragmatic.

The WIE Congress will be a part of the Pakistan Students Congress this year. The Pakistan WIE Forum in Collaboration with the South Asia GOLD WIE Committee brings you a lot of exciting stuff to look forward to for this year's PSC. Join us as a WIE delegate at the Congress from 7th to 9th September 2012 at GIK Institute of Engineering Sciences and Technology, Topi, District Swabi, Pakistan.

For More Details visit: website: www.gikieee.wordpress.com/psc

Call for IEEE Women in Engineering Videos In 2012

The IEEE Life Members Fund of the IEEE Foundation funded the creation of an IEEE Women in Engineering video. The video will serve as a public service to highlight modern day engineering role models as well as help establish IEEE WIE's presence as experts in the best practices for promoting women in engineering. The video will highlight engineers doing their "work" and provide statements to enhance the public's understanding of the contributions of women technical professionals. In addition, WIE would like to capture video footage of IEEE Women in Engineering Affinity Groups and Student Branch Affinity Groups conducting activities. The submission deadline is **31 August 2012.**



Mehwish Iqbal - Designer

Rabia Khalid - Editor

Onib Nasir - Reviewer