COMPUTER SCIENCE

**Department of Computer Science**
**COMSATS Institute of Information Technology Lahore**

The right way to horizon – COMCS | October and November

In this Issue News
1. New Appointments
2. Promotions
3. Addition
4. New Head Of The Depart
5. Worthy Director
6. In charge Academic

7. Faisal Tehseen Shah
8 . Prizes Won
9 . Conferences
10 . Sabbatical
11. Visits Aboard

Patron: Dr. M A Bodla | Head: Dr. Mudassar Naseer | Chief Editor: Dr. J. S. Mirza | Editors: Ms. Sana , Ms. Ayesha

## NEW APPOINTMENTS / PROMOTION / ADDITION

# THE WORTHY DIRECTOR



Dr Bodla has been appointed as a new director at CIIT Lahore. Because of his numerous official engagements I have not been able to get a time slice to get his profile for publication in this newsletter. I hope to get appointment from him soon. He joined Lahore CIIT almost two months ago.

Before he joined Lahore CIIT he was director of CIIT Sahiwal and CIIT Rohri.

## HEAD OF THE DEPARTMENT



Dr Mudasser Naseer has been the new head of the department (HOD) of the Computer Science Department of CIIT Lahore since October 2010. He has bagged a number of following Master degrees:

MSc in Statistics (G.C. Lahore, 1988); MBA (PU, 1999); M.Phil. in Statistics (G.C.U, 2001); MS in Computer Science (LUMS, 2004) and then proceeded to China for PhD in Pattern Recognition and Classification.

He has 5 degrees altogether to his credit. His professional experience started form Board of Revenue in Pakistan as Documentation officer (91-94) and thereafter he zealously pursued Teaching Career. He was lecturer in Statistics from 1994 to 2010 and joined CIIT Lahore in August 2010 as Assistant Professor of Computer Science.

Besides his above professional engagements he also participated in two international projects conducted under the supervision of International Labor Organization (ILO) and USAID. The first project was Baseline Survey on Child Labor in Pakistan conducted under supervision of ILO-IPEC.The second project was Rebuilding Agricultural Markets Program (RAMP) conducted in Afghanistan under USAID. He was Technical Supervisor and the nature of his work was Designing and Analysis of survey.

He also worked besides the above two projects on Impact of Family Planning Advertisements on family planning awareness in Pakistan.

We the faculty of the department wish him best of luck in his new position.

## IN CHARGE ACADEMICS

Dr Abbasi has been given an additional assignment of "In charge Academics" in the new administration of CIIT Lahore. This is highly charged and loaded assignment that requires of handling a great many chores.



DR Abbasi has a suave and friendly persona. His empathy as I know of in the meetings especially with regard to students of the campus problems is limitless.

His qualifications include
• MSc. (Math, PU, 1973); he secured a coveted second position in the Punjab University
• Research scholarship at Australian National University (1975-19780)
• PhD under cultural exchange program from Moscow State University of Russia (1983 - 1987)
• Post doctorate at Matsuame International Foundation Japan (1989-1990)
• Fellowship at China Tsing University, Beijing, China awarded by HEC (2010)



He has 25 research publications to his credit
He has guided 5 MS /Phil students.

He stared his teaching career from Gomal University (1974- 1979). Later, he took up a position at Islamia University Bahawalpur (1979 -2001). He served at University of the Punjab, Lahore (2001-2002) before joining CIIT Lahore. He has worked as HoD/chairman Mathematics department of CIIT and also filled important positions

## FAISAL TEHSEEN SHAH



He is about to finish Ph D from PU Lahore in Total Quality Management. His research was on Optimum Software Process Improvement Paradigm for Quality Practices in Software Industry The relevant description of the project is given below

Overall behavior of local software industry towards quality if simply phrased is, "No Quality Culture". It is the cause of lower Information Technology (IT) exports due to non competitive nature of local software product development practices which are laden with delays, non-conformances and inconsistency. Local quality culture lacks quality awareness and is immature in following good quality practices and implementing quality improvement standards. As a step further in this direction the objective of this study is to map the actual environment and true culture of Small and Medium Software Houses (SMSH) towards quality improvement and process improvement by implementing Total Quality Management (TQM) philosophy.

It was an exploratory research effort in the domain of Total Quality Management (TQM) and Software Process Improvement (SPI). The research begins with literature review of major quality standards implemented in the local industry. The behaviour of international quality standards was deliberated towards SMSH. A survey was conducted to evaluate the current quality practices and develop a process improvement model within the local SMSH. For this purpose software houses that were members of statutory and professional organizations such as Pakistan Software Export Board (PSEB), Pakistan Software House Association (PASHA) were selected. Listing of commercially available directory of RozpePak was also referred. For this survey the quality constructs and data collection instrument were designed based on literature review about small and medium enterprises culture and leading software quality models such as CMM, CMMI, ISO, SPICE and PSP/TSP. The results of the survey were analyzed and reported to high light quality problems being faced by SMSH to implement quality.

Study included descriptive as well as empirical analysis. Descriptive analysis was based on comments via survey and personal interaction while conducting the survey. The empirical analysis included correlation and regression analysis of quality constructs. Structural Equation Modeling (SEM) technique was used to develop an optimized Lean Quality Improvement Model (LQIM) for standard quality practices in the local software industry. Eight quality constructs were developed to ascertain the level of current quality practices in the SMSH and evolve a LQIM. In correlation analysis all seven independent constructs were found significant towards the dependent variable Quality Improvement. Regression analysis revealed that only four of these independent quality constructs contributed significantly towards the dependant variable Quality Improvement. Through Structural Equation Modeling (SEM) the LQIM was evolved. This model presented four quality constructs and ten of their respective quality practices as significant.

LQIM evolved as a tailored and economized paradigm according to the needs and perceptions of the local IT practitioners. Also LQIM evolved as an indigenous model which when improvised in accordance to the SMSH cultural and quality improvement recommendations is proven to be a fit model for SMSH. The LQIM has already been ratified according to generally accepted good fit indices in SEM analysis. In order to implement LQIM by SMSH implementation of Indigenous LQIM was proposed using the Deming's philosophy of Plan, Do, Check, Act (PDCA) Cycle for continuous process improvement. The set of recommendations for SMSH software process improvement and proposed LQIM paradigm will give the innovative and flexible directions for SMSH to change their culture and improve their processes and software quality.

## PRIZES WON

Living up to our tradition, the Department of Computer Science secured second position in Speed Programming Competition at VisioSpark-2010 held at CIIT, Wah Cantt. on October 11, 2010. In total, more than 60 students from all over Pakistan participated in Speed Programming Competition.




## CONFERENCES/ SABBATICAL/ VISITS ABROAD

Dr Saqib Rasool has gone to UK on a post doctorate.



Dr Syed Asad Hussain will soon leave for Australia for Post doc.



Dr Syed Asim Ali may go to France subject to his official leave approval to go for post doctorate



## A POEM ABOUT COMPUTER

Have u ever given a THOUGHT
what life has become all ABOUT
our WINDOWS open on the face of GATES
when it should be our LIFE-MATES

we play around with MOUSE
when it should be our SPOUSE
always our hands are on the KEYS
when it should be on our 'WOULD-BEes'

how long can u go on CODING
when u should be at ooty BOATING
hey u robots running after CAREER
listen to this carefully DEAR