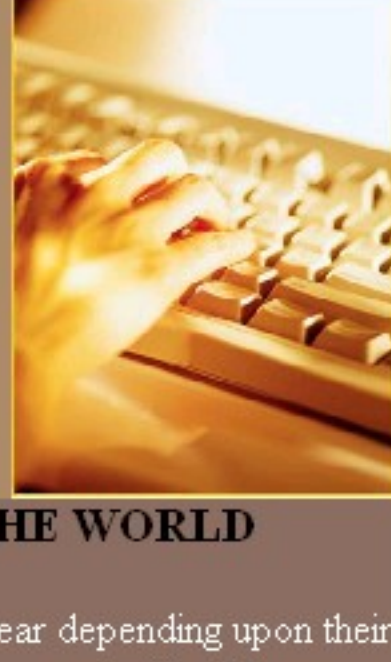# Department Of Computer Science
COMSATS Institute Of Information Technology, Lahore Campus

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Head: Dr. Syed Asad Hussain
Chief Editor: Dr. Javaid Sikandar Mirza
Editors: Ms. Sana Rizwan, Mr. Nasir Rauf
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Watching New Horizon
NEWS N VIEWS
November Issuance

2-DAY WORKSHOP ON SCIENCE TECHNOLOGY AND INNOVATION POLICY

The workshop was held in Islamabad club Islamabad on 17 and 18 of October 2007. More than 300 people attended it. Dr Nawaz sharif of Maryland USA gave a series of seminars The outstanding points of the talks can be summed up as follows The talk were engrossing, smooth and flawless. Boredom never peeped in. No Sleepers, dozers, dazing the talks as you find them during monotonous talks could be found.

The definitions of Science, Technology and innovation were clearly laid out.

Every member of audience was all praise for him. One can say he debunked a myth with his illustrious examples that technology followed science. Not necessary. The reverse can be equally true.

Poly technique are full of technologist but their respect in the eyes of the government and people is bare minimum. The respect of a technologist often founding as opposed to what we have to-day He narrated an instance besides many others that he was find of in south Korea where he had personal contacts with high bureaucrats. an technologist was honored by giving a seat next to the president. That elicited his cry who said that it was beyond his wild expectations.

ABOUT GOOGLE WAVE
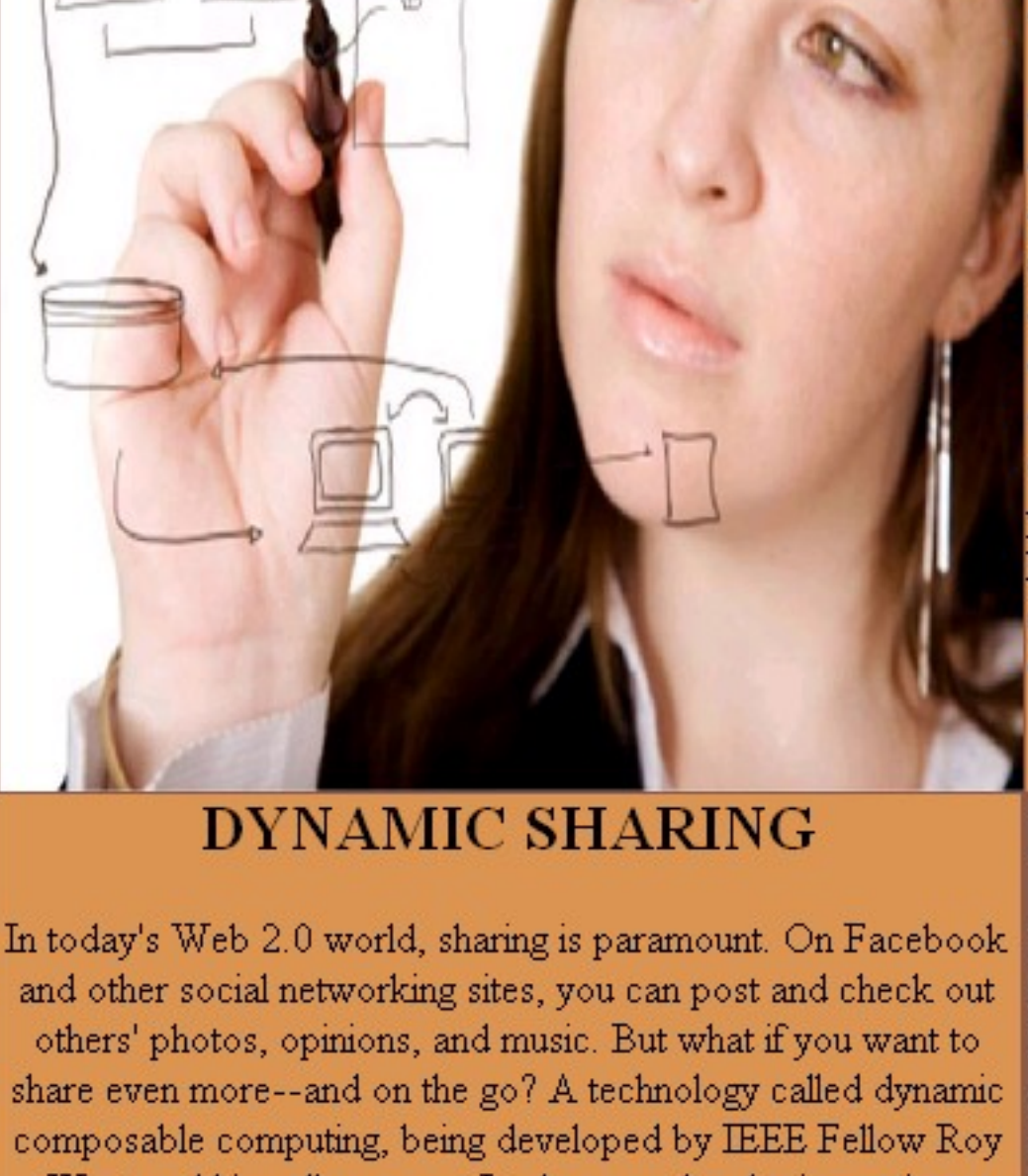### (REF: SARFRAZ NAWAZ TO PAKGRID'S MAHDI BALOCH)

Google Wave is an online tool for real-time communication and collaboration. A wave can be both a conversation and a document where people can discuss and work together using richly formatted text, photos, videos, maps, and more.

A wave is equal parts conversation and document. People can communicate and work together with richly formatted text, photos, videos, maps, and more.

A wave is shared. Any participant can reply anywhere in the message, edit the content and add participants at any point in the process. Then playback lets anyone rewind the wave to see who said what and when.

A wave is live. With live transmission as you type, participants on a wave can have faster conversations, see edits and interact with extensions in real-time.
http://wave.google.com/help/wave/about.htm

DYNAMIC SHARING

In today's Web 2.0 world, sharing is paramount. On Facebook and other social networking sites, you can post and check out others' photos, opinions, and music. But what if you want to share even more—and on the go? A technology called dynamic comp-atable computing, being developed by IEEE Fellow Roy Want and his colleagues at Intel, can make sharing various devices wirelessly possible.

DYNAMIC SHARING
BY ANNA BOGDANOWICZ

In today's Web 2.0 world, sharing is paramount. On Facebook and other social networking sites, you can post and check out others' photos, opinions, and music. And with the ever more popular Twitter, you can send mass messages about everything from the cereal you ate this morning to your politics. But what if you want to share even more—and on the go?
Picture this: You're just back from vacation with a smartphone full of photos, and you run into a friend in a local coffee shop. You want to show her your photos, but your phone's screen is just too small to really see anything. Not to worry. There's a computer monitor in the shop, so you wirelessly connect your photos to it. Just like that, your photos appear on the larger screen.

Wirelessly linking the monitor to your phone is part of the future, according to Intel Corp. And it's being made possible thanks to dynamic comp-atable computing (DCC), a technology being developed by IEEE Fellow Roy Want and his Intel colleagues in Santa Clara, Calif.
A senior principal engineer at Intel Labs, Want described DCC at the March media event in New York City celebrating IEEE's 125th anniversary. IEEE members working on breakthrough technologies discussed their work with the press.

GOOD TIMING

Several key factors make DCC appealing, Want notes, especially in an increasingly mobile world. MIDs such as the iPhone have limitation, including small screens. Those problems can be solved with DCC. "I've always been excited about smartphones' capabilities," Want says. "Our technology allows us to make better use of them."
Advances in processor technology are enabling greater interoperability between mobile devices and desktop computers. Also, high-bandwidth wireless communication is more prevalent. According to Want, the wireless standards being developed for many of today's MIDs make it easy to create the connections DCC needs to link to different components. In particular, two short-range wireless standards—ultrawideband and IEEE 802.11n—boast data rates of about 500 megabits per second, comparable to those of a wired connection. "For the first time, we can consider connecting the major system components of a computer architecture wirelessly." Want says.

THE SOLAR PV MODULES

Poly-Silicon, efficiency 16%, life 25 years, absolutely no maintenance except dusting off) are coming down from $ 8 per Watt to $ 3 per Watt (today) and expected to drop further to $2.5 per Watt by the end of 2009, plus the cost of Balance of System (Charge controllers, inverters, etc) leading to Installed cost per Watt in USA (includes labor) today is $ 5 per Watt in Houston, Texas, USA where the labor is still quite expensive). Please contact if you need more information. Dupont sponsored high efficiency Triple Junction Solar PV Cells with efficiency of 43 % have been designed and tested by Physics Department of University of Delaware, (but costing three times), and the lab is aiming to increase Efficiency of 50% soon.
Having supported NASA's International Space Station from its inception stage, all electricity to keep it going is produced by SOLAR PV Modules and for redundancy Fuel-Cells, we have been using in space 300-500 kilo-meters above earth deriving all energy from SUN for all Space Vehicles and Satellites.
We are currently working with an American partner to set up a 75 MW Poly-Silicon Technology, Solar PV Module Assembly Plant at Lake Charles, LA and a 25 MW Solar PV Grid-tied Farm in Texas.
Also, we are in the process of establishing a non-profit organization for people without any electricity (mostly low income) and to give them $10 -15 Solar Cooker to minimize Deforestation, that can also produce a bottle of bacteria free water for drinking, both within 45 minutes.

From: Bashir A. Syed
Retired Aerospace Physicist
Member: APS, AAPT, UCS, IEEE, ASES, and INES
Vice President, R&D
Alt-EnergyTech, Inc.
1120 NASA Parkway, Ste. 205
Houston, TX 77058
www.altenergytech.com
Cell: [713-560-6668]

RESEARCH AT UNIVERSITIES

In one of my observations many faculty members at the universities do not expose themselves to scientific research. This is, for sure, an incontrovertible finding no body can deny. And why would they do so if their accountability on the part of university administration is virtually non-existent or too little? Non-producing faculty offer many excuses, some of which may be right, for instance

• the paucity of the time
• absence of research guidance from seniors.
• lack of research atmosphere

Whatever, the fact remains unless they are pressured, one cannot expect him around even if decades pass away. One strategy that has struck me lately to drive them to do research is to add a section in their assessment form they have to submit at the end of each year on the basis of which they yearly increments are decided. Every one of them at least the action can know HOW MUCH EFFORTS HE MAKES IN DOING RESEARCH. Many faculty members do not even bother to do the efforts. We want them to put in tangible effort. FOR RESEARCH.

In each submission every year they must submit how many papers were written by them, NEVER MIND IF ALL OF THEM WERE REJECTED. No shame upon them if their papers were thanked by the conf / journal evaluators. They must take heart from the fact that currently only 25 to 30 percent of papers are accepted

THEY SHOULD KEEP THEIR REJECTION ANSWERS RECEIVED BY THEM FROM CONFERENCES AND JOURNALS AS PROOFS THAT THEY DID WRITE PAPERS, SUBMITTED THEM AND WERE REJECTED. IF A PERSON HAS GOT ALL HIS PAPERS REJECTED HE MAY BE JUDGED BETTER THAN THE PERSON BY THE ASSESSOR COMMITTEE OF THE DEPARTMENT. THE ASSESSOR PANEL WILL DECIDE IF HE HAD ENOUGH TIME TO PUT ITS EFFORTS. IF ANY PERSON SAYS HE DID NOT EVEN WRITE PAPERS, NOT TO TALK OF REJECTION, HE HAS HIMSELF TO LOSE

How many research paper you wrote, which were REJECTED
Title of the paper
The conf /journal you sent your paper
Local or International conf
In the author list on the paper, the place of your name
Pages of the paper

You may be asked to produce the papers and the rejection note from the journal / conf

Title of the paper
The conf/ journal you sent your paper
Local or International conf
In the author list on the paper, the place of your name
Pages of the paper

The assessor committee may opt for some means to decide abut penalty. BUT THE ASSESSOR COMMITTEE MUST ACT AND GIVE ITS RECOMMENDATION. The person who has not even written a paper must be interviewed by the panel. In many cases fear of going before committee would too much trouble. The blank years in which nothing has been produced could be decided by the panel to be one year or two years

MIRZA

TOP 10 UNIVERSITIES IN THE WORLD

Universities ranking is changed every year depending upon their achievements. Very recently it has been reported by Muneer Ahmad who wrote to PUTP that the top 10 universities in the world are the following

TOP 10 UNIVERSITIES 2009
Harvard University
Cambridge University
Yale University
University College London
Imperial College London*
Oxford University*
University of Chicago
Princeton University
Massachusetts Institute of Technology
California Institute of Technology
Columbia University
* = joint place

Out of 100 best universities in the word, North American universities are 36, European universities are 39, and Asian universities are 16. Harvard is still top, while Cambridge moves up from third to second place. Oxford slips from fourth to fifth rank.

University College London jumped up three places from seventh to fourth.

REFERENCE MANAGER 12
(for Windows®)

No matter where you or your colleagues are in the world, so are your references. With Reference Manager you can collaborate with others on a network–or even the Web.
Discover how Reference Manager simplifies your publishing!
Search Internet databases
Organize references easily
Publish references on the Internet
Watch the bibliography appear as you cite

WHAT'S NEW IN REFERENCE MANAGER 12?

Link PDFs and other files to a reference and more with your Reference Manager database-now display with file icons Cite-While-You-Write™ in Microsoft® Word 2007 for Windows-access formatting options easily

• Collaborate with colleagues using the enhanced Web Publisher

• Spell check an entire database as well as individual records
• Identify duplicates easily with new options
• Use new reference types–Edited Book, Online Source and Grant-and new fields, including the NIH required PMCID
• Find out more about Reference Manager
• Try Reference Manager-30-day trial
• View online tutorials
• ResearcherID – a free, online community where you can host your personal publication list. Import your references from Reference Manager (RIS format) or search Web of ScienceSM (requires subscription)
•Learn more and register for your FREE ResearcherID today

BORROW A HI-FI

With DCC, you will be able to play the music stored on your laptop on your friend's stereo system, wirelessly. Or, from your laptop, you'll be able to put together a polished video of your recent vacation from the clips still in your camcorder and then show it at a friend's house on his TV—again, wirelessly.
• Basically, DCC allows you to build your own computer system on the fly," Want says. The technology lets people use their mobile Internet devices (MIDs) such as smartphones and netbook computers to connect wirelessly to nearby monitors, speakers, keyboards, and other components—even USB devices. Intel, which has a prototype, says DCC could be commercially available in about five years.
"DCC was developed to overcome the limitations of MIDs," Want says. "We wondered if we could wirelessly borrow a larger display, keyboard, or other peripheral from the nearby infrastructure."
Key to DCC technology is the composition manager, a component that will have to be built into everything or be downloadable as software. Want says DCC will work a bit like Bluetooth discovery, querying its immediate area for computers and devices to connect to. However, unlike Bluetooth, it will actually tell you what types of components are shareable on each computer. Normally, you make a wireless connection first and then discover services on that computer using several plug and play. The composition manager compresses several of these steps. It scans for devices—similar to the way your computer looks for Wi-Fi—as well as shareable resources.
At one level, the composition manager presents the resources to a user with a pun-the-dots metaphor. In other words, you can share a resource simply by drawing a line to the device you wish to share. "At a higher level, you can have a set of these connections as a composition name, and in the future, to save time, just select that name from a pull-down menu," Want explains. "To keep it simple, default configurations of several common compositions might be preconfigured in a device at the time of purchase."

CHALLENGES

Intel's developers face great obstacles. If it's so easy to connect to surrounding hardware, what's to stop a stranger from accessing your information? Want says the likely solution will be to have users type in a password for the components they want to use. That would make the connection just as secure as the one an employee uses to connect to the company server when telecommuting. That approach might be further improved through technologies such as near-field communications, in which a device is brought within 1 centimeter of another to mutually make the connection, using physical proximity to enforce the right to connect.
But the number-one challenge, as with most new technology, is adoption. For companies to build their devices with DCC, wireless standards must be developed. "Work on standards for larger-d discovery is already taking place, and so is work around wireless display," Want says. Once standards are in place, it will be time to win over consumers. For that, Want goes by the saying, "If you build it, they will come. People will realize that a device that can share is much more valuable than one that can't."
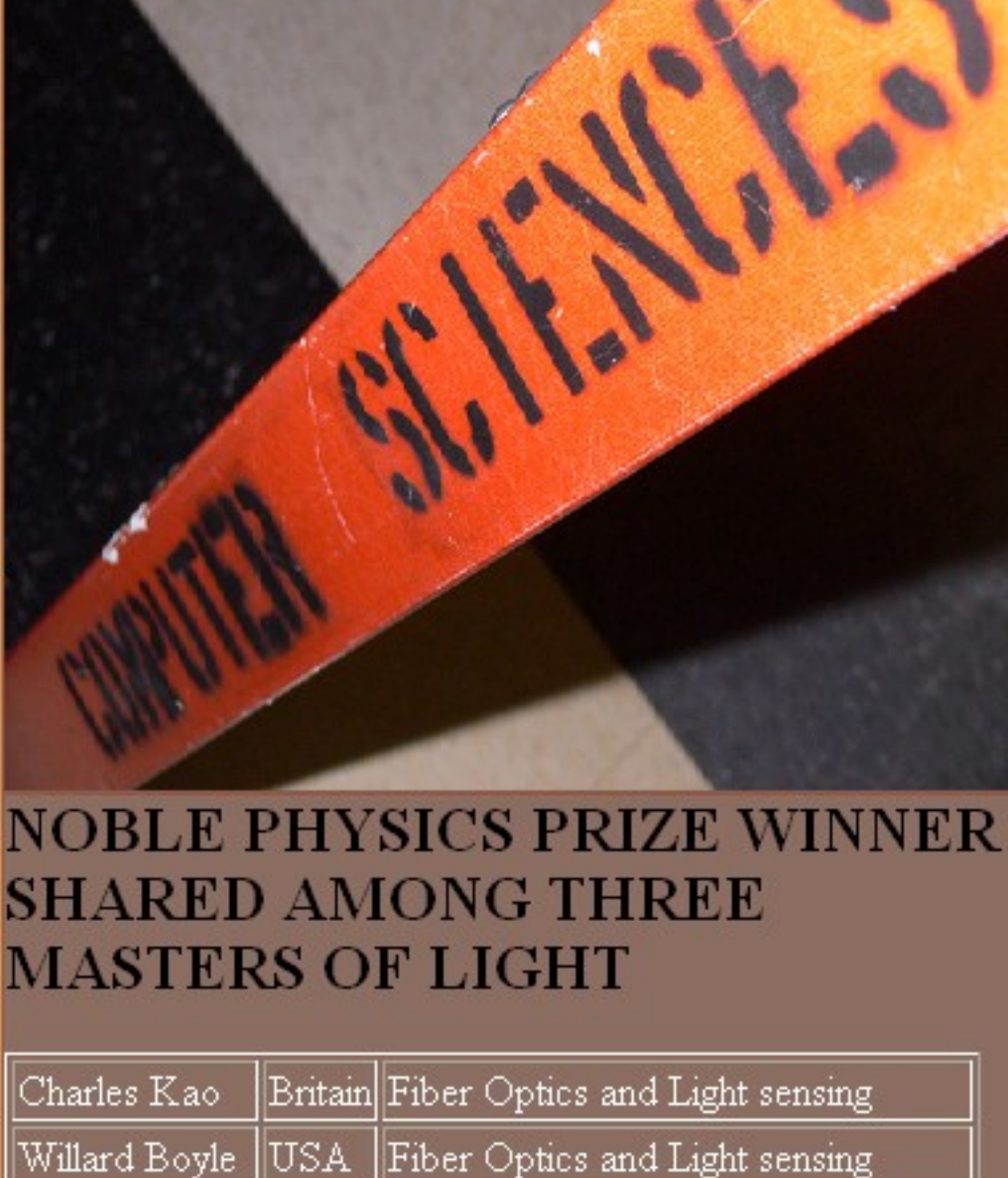
NOBLE PHYSICS PRIZE WINNER SHARED AMONG THREE MASTERS OF LIGHT

Charles Kao	Britain	Fiber Optics and Light sensing
Willard Boyle	USA	Fiber Optics and Light sensing
George Smith	USA	Fiber Optics and Light sensing

GOOGLE

Google never says how many servers are running in its data centers. But a recent presentation by a Google engineer shows that the company is preparing to manage as many as 10 million servers in the future.
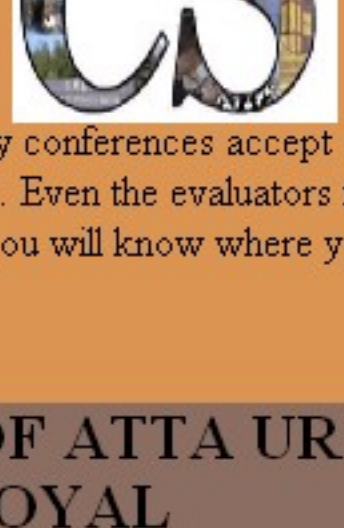
SECTION

How many courses were allocated to you?
Ho many labs were allocate to you?
Were you engaged in improvement of your qualification, if so, which courses you were registered?

List the papers you published last year giving the papers' titles, conf /journal name, published pages etc.
1
2

Rejection of a paper is not an insult. Many conferences accept only about 25 to 40 % of the submissions. Even the evaluators f the papers arte not good enough at east you will know where you stand

NUGGETS FROM PROF ATTA UR RAHMAN FELLOW ROYAL SOCIETY

I "wondrous world of science" published in Dawn of Nov 15 2009 by Dr Atta Ur Rahman some nuggets have been offered for inquisitive mind to dwell and wonder what the science is doing for us.

THE CYBORGS ARE COMING!

John Donoghue at Brown University in the US has developed a un gate technology to enable paralyzed person to operate TV or light switches or similar work. DARPA is spending $50 million to upgrade brain controlled artificial limbs.

INSECT DRONES

Mini camera fitted on insect sized drone aircraft and controlled stealthily by a frequency operator can spy upon you. Your sound and your movements can be watched by the tiny spy drone like a fly sitting on a wall and communicate to remote sitting miles away. (for more work view. tinyurl.com/ypxmtdg)

NANO SUBMARINES

Harvard University has developed a tiny device-- (You may call them nano submarines)-- which can be coated by cobalt who responds to magnetic field. An external magnetic field therefore can drive them in blood vessels and if these nano submarines are carrying a load of medicine which can be several times weightier than their carrier the medicine can be transported to a location inside the body by a magnetic field operated for outside (Nano letters, DOI: 10: 1021/nl900186w)

KILLING VIRUSES

A search has been done at UK that nano particle made form silica and metal carbide ceramic can kill 99.9 % of viruses with an hour. Application of this could be in making face mask, air filters, cash machines trolley handlers in supermarkets to clean up flu