

Tech Contest

The year of combats

NCPC 2004 held

SYED TASHFEN CHOWDHURY, back from Chittagong

THIS year is turning out to be one of the most exciting ones for young programmers, many of whom took part in the combat of brains twice in a row. The second battle, the 4th National Computer Programming Contest (NCPC 2004), hosted by the International Islamic University of Chittagong (IIUC) contest was held at the university's permanent campus at Kumira in Chittagong on December 3 and 4.

Co-organised by Bangladesh Computer Council (BCC) and the Ministry of Science and Information & Communication Technology (MOSICT) a grand ceremony kicked off the contest.

"Besides participating in programming contests and producing programmers, IIUC is also trying to encourage programmers all over the nation," said Dr. A K M Azharul Islam, Vice Chancellor, IIUC while presiding over the opening ceremony. Islam also urged the necessity of e-learning in the national academic curriculum.

Post and Telecommunication Minister Barrister Aminul Haque inaugurated the ceremony as chief guest and admired IIUC's

venture for hosting such an important event. He pointed out that such contests act as a boon to education.

"A standard university environment is necessary for creating dynamic students," said



A female team does brainstorming during the contest.

Haque. The Minister promised to establish a digital telephone exchange at the campus as well as a post office in Kumira.

"Hopefully by next year, IIUC will be connected to the optical fiber channel, which will run along the border of this campus," informed Haque.

A mock contest followed the inauguration ceremony, while the final competition was held the following day, at the central library hall of the university. Over 280 students from more than 42 academic institutions of the nation participated at the contest

students in programming," said Dr M Kaykobad, Professor Computer Science and Engineering (CSE), Bangladesh University of Engineering and Technology (BUET) at the prize ceremony, which was held later that night.

Later, Shahriar Manzoor of the CSE department of South East University and the chief judge of NCPC 2004 announced BUET Explorer as the champion, for solving 7 problems in 1065 minutes.

BUET Xtreme took the second position by solving 6 problems in 988 minutes, while 'Golden Amalgam' from East West University came in third, solving 6 problems in 1032 minutes leaving Notre Dame College Hexadecimal in fourth position.

The mighty BUETs did not stop at the second and third position, as BUET Triumph snatched the best female team award along with the fifth position.

"Through such contests we have motivated the young to improvise and strengthen their programming skills and generate more programmers for this nation," said Dr A K M Azharul Islam, vice chancellor, IIUC before handing over the prizes among the winners and pulling down the curtains on NCPC2004.

Tech News

A new digital experience for Bangladeshis

STAR TECH DESK

HP (Hewlett Packard) revealed its expansion into the world of digital photography with a range of offerings designed to provide a digital lifestyle to consumers. The announcement came in a press briefing titled 'Big Bang 3', held on December 1 at the BCS Computer City at Agargaon, and was organised by HP Bangladesh in alliance with InPace Communications, one of the country's leading IT marketing agency.

Introducing its 'One Touch, One Print' slogan, HP showcased their range of products and solutions aimed at bringing its consumers a total digital experience. The full new product line includes digital cameras, photo printers and all-in-one scanners, entertainment-based notebooks and desktop PCs.

A total of thirteen new products were launched at Big Bang 3, which includes a new digital camera (HP Photosmart-m307) with instant share option,

3.2 mega pixel resolution, digital 15x zooming and video recording capability. The printer series consists of color inkjet printers that offer various professional, easy-to-setup, vibrant photo quality, and compact equipment designs - HP Deskjet 3845, Deskjet 3745, Deskjet 6540 and Deskjet 5740. Two office-compatible Laserjet printers were also launched - HP Laserjet 1320 and 1160 printer series for middle-budget prices. The new independent photo printers - HP Photosmart 325, Photosmart 8450 and Photosmart 7450 were also in the list.

Mohamed Altaf Khan, sales director for HP's Asia emerging countries, imaging and printing group (IGP), promised to deliver an enjoyable digital experience for Asia Pacific regional consumers through innovative offerings, services and partnership.

"Today's customer service is all about feel and touch," believes Altaf. HP plans to open retail shops with demonstration



A display of HP digital products at the seminar

booths where customers can attain a full preview of HP's products. "We want to build a partnership network in terms of customer care; and HP's focus is surely moving towards the growing number of IT consumers in Bangladesh."

According to Altaf, Bangladeshis have become significantly more tech savvy in their IT knowledge over the last two years and rural communities - who are eager to have their share of the technology available to them - are no exception.

Tech News

Scientists make phone that turns into a sunflower



Dr. Kerry Kirwan of the University of Warwick poses with a biodegradable cellphone.

REUTERS, Amsterdam

Scientists said on Monday they have come up with a cell phone cover that will grow into a sunflower when thrown away.

Materials company Pvx Research & Development, at the

request of U.S.-based mobile phone maker Motorola, has come up with a polymer that looks like any other plastic, but which degrades into soil when discarded.

Researchers at the University of Warwick in Britain then helped

to develop a phone cover that contains a sunflower seed, which will feed on the nitrates that are formed when the polyvinylalcohol polymer cover turns to waste.

"It's a totally biodegradable and non-toxic plastic," said Pvx

spokesman Peter Morris. "This is the first product that we've made public. We're working with blue chip companies and will introduce several products next year," he said, adding it would be used in electronics, horticulture, ammunition and household cleaning.

The company's new plastic, which was created over the past five years but was in development for longer, can be rigid or flexible in shape.

Some 650 million mobile phones will be sold this year, and most of them will be thrown away within two years, burdening the environment with plastics, heavy metals and chemicals. A biodegradable cover can offer some relief for nature, Warwick University said.

Motorola said it had not yet decided if it would introduce a model built with the new plastic, and that it would take until at least the second quarter of 2005 to get a commercial product.

"(To improve) the quality (of the plastic) is something we're working on," said Motorola project manager Peter Sheard, adding the new plastic may be used in snap-on covers first.

Many young consumers buy cheap and interchangeable plastic covers to personalize their standard phone.

Tech Focus

Metronet lays first private fiber-optic network in city

RIDWAN A. KABIR

METRONET Bangladesh Limited (MBL), a local private sector IT company, has laid the first ever fully digital fiber optic based metropolitan data communication network in the nation's capital. This metropolitan area network (MAN), which adds an edge to existing governmental efforts in IT or ICT development, is expected to greatly reduce set up and running cost and provide retail and corporate customers instant access to high bandwidth.

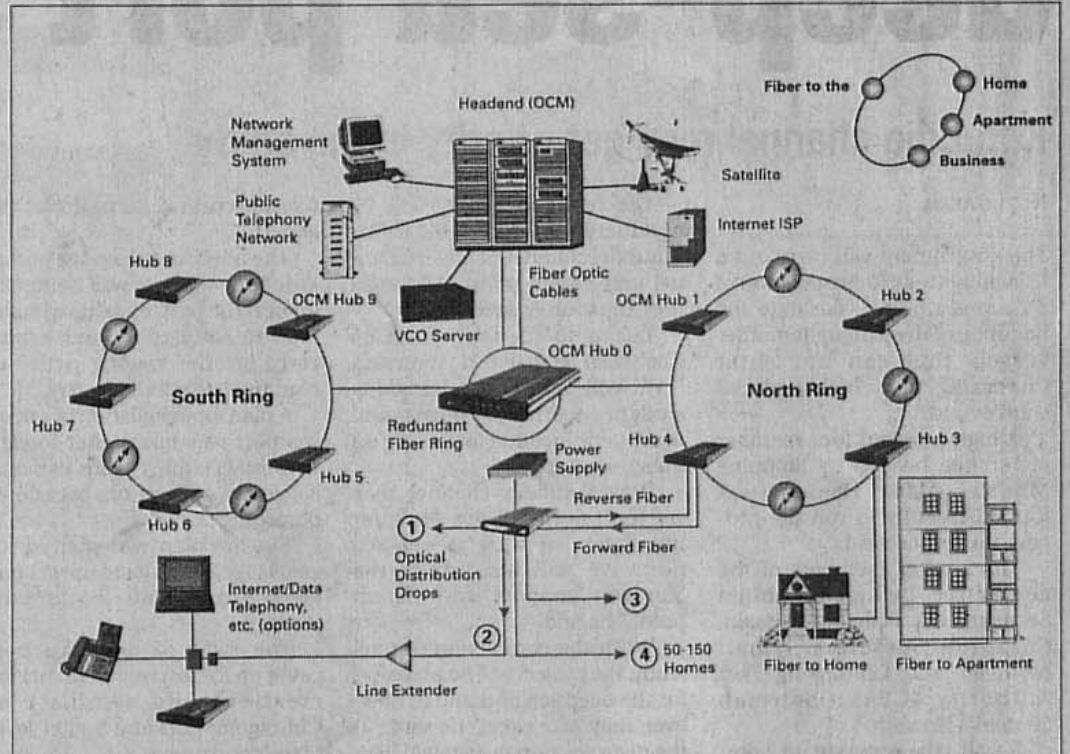
The company promises end-to-end fiber optic connectivity to the last mile, thus entirely removing the need for copper wires, which have high maintenance costs and are easily susceptible to technical weathering and defects. The use of optical fiber ensures excellent bandwidth availability thus enhancing performance under critical load conditions.

"We offer guaranteed transmission latency of less than 10 milliseconds," says Ferdous Azam Khan, CEO, MBL. "The result is a higher data transfer rate compared to all other wireless, VSAT, or copper wire solutions that exist in the current IT market of the country."

Currently in the first phase of the project, the network already spans the north, central, south, east and west parts of the capital, covering Tongi to Sadarghat, Baridhara, Gulshan, Dhanmondi, Tejgaon, Karwan Bazar to Mirpur, Maghbazar, Eskaton, Ramnura, Malibagh, Kakrail to Motijheel, Dilkusha, and their surrounding areas.

The network consists of eight loops and branches, reinforcing the data path. The multi-core network thus assures rerouting of specific data traffic even in case of a fatal cable failure. The fiber-optic technology offers an interesting solution to such events. "Laser rays are passed down the network, and basically gets reflected back from the point of non-connectivity," Azam clarifies. It is just some mathematical calculations away after which the point of non-connectivity is found out and teams from the company set out to fix it, thus cutting off replacement cost of any network links.

The network-operating centre (NOC) of the company is geocentrically located in



How Metronet plans its network.

Sonartori Tower at Sonargaon Road, Dhaka. Equipped with state-of-art equipment, this NOC has a switching capacity of aggregate bandwidth exceeding 200 gigabits per second, which can be scaled up according to customer demand. The full-switch to futuristic optical metro ethernet deployment is one of the very first in the world scenario in case of a metropolitan area.

The network, running on transmission of noise-free data capacity using light as a carrier, ensures security and reliability with zero risk of distortion due to electromagnetic interference, static charge, or cross-talks generated from various sources in the external environment. Transmission security is further enhanced within, as tapping of radiant energy is virtually impossible, thus building a vast area of governmental and national interest. The technology also supports customized VPN, Firewall, and other security equipment measures, which allows prevention of unauthorized access to private networks.

"Once completed, our network will allow fiber connection of individual PCs to the submarine cable scheme once it enters the country," Azam says. However, at present, one drawback is the absence of a

governmental master plan of the post-submarine-cable establishment in Bangladesh. Without an end-to-end fiber optic connection users will have to turn back to the copper wire connections used as a trend in the country to get onto the submarine cable network, thus renouncing quality and capacity of the bandwidth received.

"We also welcome local ISPs and bandwidth vendors to get connected within our fiber-optic network," says Azam. The connected ISPs would then have to route its channels using their own choice of cable network.

According to Azam, it is essential at present that a connected network is set among the internet users of the country. "Many among us are connected to the internet, but very few are connected among ourselves!" he exclaims. Mentioning how different international industrial networks (e.g. Pan American Airlines, AmTrac Railways, AT&T Telephone Company) allow the private sector to make use of their network, thus increasing connectivity, wider coverage and reliability, the CEO of MBL describes how this finally brings down the user-cost to a minimum. "The more we share our virtually inexhaustible network, the less each user have to pay," he cites, referring to local fiber optic

foundations' reluctance to share their links for 'security' reasons.

A good example of local internetworking in Bangladesh is Grameen Phone's voice telephony network, which is connected to Bangladesh Railway's internal fiber optic network without compromising either organization's vital data security aspects. Bangladesh Railway optical fiber network was primarily laid to connect 1200 plus telephones with advanced electronic signaling equipment. Later, the network was leased to Grameen Phone, allowing quick expansion of the network, thus enhancing user compatibility and capacity.

Mentionable is the price tag that Bangladesh Tar & Telephone Board (BTB) puts on a full duplex 64 kbps of net bandwidth, a sum of Taka 35,000 per month, in contrast with India's price of Rs 2,000/month for the same package. It is hoped that conservative approaches from the governmental offices will be withdrawn, making way for the BTB network to provide private sector access at an affordable cost. Collective technical measures from the public sector are also required so that net connectivity can reach various points across Bangladesh with considerable affordability.

Tech Focus

Sunglasses player not a bargain

AP, Los Angeles

It seems like a cool idea - sunglasses with a built-in digital music player and speakers. No headphone cables to untangle as with most portable players. Music actually riding on your ears. Zero retinal damage from ultraviolet radiation.

And if Oakley's new breed of eyewear, dubbed Thump, retailed for about \$100, it might be a tempting alternative to some of the rudimentary flash memory card music players on the market.

But these supershades cost \$395 for a pair with 128 megabytes of memory and \$495 for the 256-megabyte version, which sports

polarized lenses. With typical audio compression rates, that means the larger version holds roughly 64 four-minute songs.

The Thump works with both Microsoft Windows-run personal computers and Apple Macintosh (news - web sites) PCs. It comes with a custom-size USB cable (it uses the faster USB 2.0 standard) that plugs into a computer just like any removable drive.

Users can swap music in WMA, MP3 or WAV formats by simply dragging and dropping files to the virtual Thump folder using the operating system's file management software. There is no support for playlists, or even for shuffle.



Oakley sunglasses with integrated headphones and music player.

Photo Tech

Models display Japanese auto giant Toyota Motor's single seater electric vehicle "i-unit", which changes form in upright position with low speed mode, and reclined position in high speed mode at a preview in Tokyo on December 3.

PHOTO: AFP



Tech Snap

The Ease story

Computer Ease Limited, a local IT company has signed a software contract with Unilever Arabia recently. Under the contract, this Dhaka based twelve years old company will develop a HR and Payroll System for Unilever Arabia, says a press release.

The software will process payroll and manage HR information for personnel of Unilever Arabia in nine Middle-Eastern and Arabian countries. The software is expected to go live in April 2005.

Recently, Computer Ease Limited has completed developing the first PDA (Personal Digital Assistant) based software in Bangladesh. This software has been developed for automating out-let-wise order capturing activities of Unilever Bangladesh.

SEDA, a donor funded facility managed by IFC, the private sector arm of the World Bank is the joint sponsor of the project. The software is now being implemented at 50 sites all over the country. The software has been developed under Palm OS 5.2 using HB++ as the development tool.