IEEE India Bulletin Vol. 12 No. 7 June 2004

CHAIRMAN'S MESSAGE

Dear Fellow Member,

Chairman�s Message

Dear fellow members,

IEEE India Bulletin is in its Fourteenth year of Publication and we the members in India are really proud of this. But, the India Council is finding it financially difficult to print 10,000+ copies each month to reach all members in India. We are looking forward to the continued support from all Sections since the Council does not receive any financial support from HQ or Region 10. In these difficult times, we are finding it more difficult to get advertisements for the Bulletin putting us into more financial problems. However we are doing our best to carry on the tradition of fourteen long years.

 You might have noticed that the print edition of IEEE's prestigious "The Institute" has almost been discontinued and nowadays one only gets the electronic copy.

The annual elections 2004 have been announced and Mr J A Chowdary, the Hyderabad Section Chair, is the only nominated candidate from India for the post of Region 10 Director elect. Starting Sept 2004 we can cast our votes electronically and hence near 100% voting is anticipated.

The "INDICON" - the annual conference of IEEE in India for 2004 will be held in Kharagpur during 20 - 22 Dec 2004. Please send in your papers by July 31, 2004 and visit the web site www.ee.iitkgp.ernet.in/indicon2004 for further details.

The first Region 10 meeting of all Section Chairs for the year 2004 was held on April 16 & 17 in Adelaide, Australia. Some Section chairs and I could not attend since the visas came in very late due to prolonged Easter holidays. A formal meeting of the India Council was held on April 16 concurrent with this R10 meet and it was chaired by Mr Raju Hira, the Council's Sec/Treasurer who happened to be in Australia on work.

IEEE along with IIT Bombay held a live Webinar on May 19, 2004 on "The Art of Analog Design" by Dr. Robert Pease that was broadcast to 11 centres. Nearly 800 people benefited and we realized that this is a very good technique to reach out to many members, More of such webinars are being planned for the IEEE student community spread out in many colleges of Bombay section to start with.

How can we be more effective professionals in our areas of work and how could IEEE be used as a medium to share knowledge that would help all of us discharge our duties to the Society at large? Let's ponder what we, the proud members of The IEEE (Eye-triple-E), a non-profit, technical professional association of more than 360,000 individual members in approximately 175 countries, can contribute.

Looking forward to your active participation in IEEE and

with best regards,

R. MURALIDHARAN

Chairman - IEEE India Council

EDITOR'S DESK

Multiplexing ability-Indians are said to be good at it!'

 In a recent presentation by a senior executive from TCS, it was highlighted that Indian software professionals are better than their peers from other parts of the world, when it comes to multiplexing of activities in work environment. They may be having expertise in many areas and can very easily switch from one to the other, as per demands in the work place, it is told. It is intriguing how we, Indians, have acquired this special multiplexing talent. Is it on account of our educational system which imparts this skill, in a subtle way,

unknown to us or the Indian culture or social system that implants such capabilities in us? An in-depth look at this important aspect is needed so that a true picture would be available. In fact, once the innards could somehow be unearthed, we can explore ways of enhancing this capability in our youngsters to enable them to excel in the global business arena.

There is a general feeling that to be most productive, one has to work with a single track mind, without looking to either side and getting distracted. But the requirement at workplace, many a time, would be the ability to manage several disparate areas of activity, especially when one goes up in the ladder. A CEO has to be well informed of the happenings in various fronts like production, marketing, engineering, R&D, HR and the like. The multiplexing capability nurtured over the years of working in different departments will come handy, to handle the affairs of the organisation from the apex level. Does it not also indicate that Indians can be better CEO materials? Perhaps that could be the reason why more Indians are now getting selected as CEOs of foreign-owned multinationals.

N.T.Nair

Editor

e-mail: del@vsnl.com

Trivandrum

1 June '04

Technology in Brief

Credit card needs owner�s voice to work

Thieves using stolen credit cards or fraudsters using someone else�s credit card details to buy goods online, is a real menace world over. Researchers are working on ways to circumvent this problem.

A novel approach now under trials at Beepcard, California is to bring out a credit card that will not work unless it hears its owner�s voice. The card requires users to give a spoken password that it authenticates using a built-in voice-recognition chip. The prototype incorporates a microphone, a loudspeaker, a battery and a voice recognition chip into a credit card, the size of which at present doesn�t exactly match that of a standard card, except in length and breadth. It is about 3 times as thick. Alan Sege, Beepcard�s CEO, says the company now plans to use smaller chips to slim it down to normal thickness.

The voice card is based on an earlier Beepcard technology designed to prevent fraud in online transactions. The earlier card has no microphone, but has a built-in loudspeaker that it uses to �squawk� an acoustic ID signal via a computer�s microphone to an online server. By verifying that the signal matches the card details, the server can establish that the user is not simply keying in a credit card number but actually has the card at hand. The ID code changes each time the card is used in a pre-ordained sequence that only the server knows. This prevents fraudsters recording the beeps, noting the card details and then playing back the audible ID when they key in the details later. However, this earlier technology cannot prevent fraudulent use of stolen cards, totally, which the new one aims to achieve.

The new voice card also identifies itself by its ID squawk, but it will not do this until it has verified the legitimate user�s spoken password. Thieves will be unable to use the card because even if they knew the password they would have to be able to copy the owner�s voice with a high degree of accuracy.

Simple voice- recognition   systems are already in use in some cellphones to provide voice dialing. The challenge here is to develop voice-recognition and audio circuitry that can be powered by a diminutive battery embedded in a credit card. To maximize battery life, the electronics are only switched on when the card is to be used. Pressing a button on the card�s surface prompts it to utter � say your password� in a clear voice. If its voice recognition software authenticates the password, it emits its ID squawk which the server then identifies, allowing the transaction to proceed.

The voice card is initially proposed to be capable of handling 10 transactions per day for two years before its non-replaceable battery runs out. But the capacity of the battery is not the only problem. It has also to be robust and flexible enough to survive the abuses of a credit card which goes into valets, hip pockets etc. Researchers have tried to address this by putting the battery in the corner of the card, which is less likely to get bent than the centre. Perhaps someone may even come up with the idea of using RF power instead of in-built battery, as in the case of contact-less smart cards.

�Sometimes when I consider that tremendous consequences come from little things�. I am tempted to think� there are no little things�

�   Bruce Barton

IEEE India Bulletin Website:

http:/ www.ewh.ieee.org/r10/india_council

This issue is sponsored

fourteenth Year of Publication

IEEE HYDERABAD SECTION

IEEE NEWS & EVENTS

IEEE BOMBAY SECTION

www.ieee.org/bombay

Communications Society Chapter

announces

Student Project Contest

Topic : Communications Technology

Last Date of Submission of entries : July 03, 2004

List of projects selected for finals : July 17, 2004

Last date of completion of Project/Product :
October 09, 2004

Presentation and Demonstration : October 16, 2004

Contest Categories

Category 1 : Under-graduate Level Students

Category 2 : Post-graduate Level Students

Rules
1.   Students from engineering colleges in India are eligible for participating in this contest.
2.   Maximum students in a batch can be 4.
3.   Panel of judges will select entries for final round; their decision will be final and binding.
4.   IEEE Bombay Section will reimburse cost of components required for project implementation for final round entries.

Prizes

Category 1: l First Prize : Rs 4000   l Second Prize : Rs 2000

Category 2: l First Prize : Rs 6000   l Second Prize : Rs 3000
l Members of all valid project entries will be given certificates.

For information and submissions, please contact :

Ashok Jagatia

Secretary, COMSOC Chapter, OSS Systems (India) Pvt Ltd,

E-401, Crystal Plaza, New Link Road, Andheri (W),
Mumbai 400053, India

Phone : +91-22-56925159, 26733299

Fax   : +91-22-26733577

Email : **ashokj@ieee.org**

Dr Bharat Chaudhari

Secretary, Pune Sub-section,
International Institute of Information Technology
P-14, Pune InfoTech Park, Hinjwadi, Pune-411057, India
Phone: +91 20 22933441/2/3
Fax   : +91 20 22934191

Email : **bsc@ieee.org**

ENIOR MEMBERS

Dear All,

Please join me in congratulating the following 5 distinguished members who have been elevated to Senior Members of IEEE in the last A&A Review Panel meeting held on 15 May 2004 in Singapore

Uttar Pradesh	**Shamsuddin Ahmad**
Hyderabad	**Rama Prasad Kannelur**
Bombay	**Preeti Bajaj**
Delhi	**Vineet Sahula**
Bangalore	**Uma S. Ranjan**

Congrats !!!!!!!!!!! and with best wishes,

With best wishes,

R. Muralidharan

Chair - IEEE India Council

Library Scan

◆Does IT Matter?◆ *Information Technology and Corrosion of Competitive Advantage*

Book by: **Nicholas G. Carr**

Published by: **Harvard Business School Press**

This book by former executive editor of HBR, Nicholas G. Carr, is a provocative one on IT. Carr argues that IT◆s great transformational power is starting to fade. However, the book is a worthwhile guide to where technology is headed for the long term. The IT business has entered a new stage. After two decades of frenzied installation of tech gear, the core functions of processing, storing, and moving information are almost universally available. Thus, he argues, even though companies must spend on IT simply to remain competitive, they no longer derive any strategic advantage from using the latest computers and software.

Carr writes: ◆History reveals that IT needs to become ordinary - needs to lose its strategic importance as a differentiator of companies - if it is to fulfill its potential.◆ Early in the last century, he points out, many companies had vice-presidents for electricity, but within a few years they vanished from the corporate hierarchy as electric power became merely another part of business infrastructure. Infotech is also now in this period of transition.

 The book will give executives and managers a way to sift through the IT wave.