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The  IEEE

MONITOR

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North Eastern USA, August 14, 2003
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Calendar of Events

Tuesday, April 11

4:00 pm -8:00 pm : Student Professional Awareness Conference at Columbia University
Join the Columbia University IEEE Student Branch and the IEEE New York Section for an evening dedicated to Careers in Engineering!
Guest Speakers: Andrew Malcolm, Professor – “Winning Resumes”
Bala S. Prasanna, IBM – Career and Life Management Skills
(See Page 14)

Tuesday, April 18

6:00 pm -8:00 pm : Lighting & Energy Conservation Program
Power Engineering Society and Industry Applications Society — New York and Long Island
Lighting & Energy Conservation Program, By the General Electric Company
The featured speaker will be: Adrienne Shulman, Specification Engineer, GE Lighting.
(See Back Page)

Thursday, April 20

6:00 pm -8:00 pm : Real-time Vision, Transit Operations Security and PATH New Signal System
Vehicular Technology Society — Dr. Visvanathan Ramesh, Siemens Corporate Research & Daniel J. Reitz, PATH. There is a \$35.00 charge for the forum and refreshments.
(See Back Page)

Friday, April 21

3:20 pm -8:30 pm : Student Professional Awareness Conference at Manhattan College
Presenting an innovative, hands-on look at the engineering industry.
Guest Speakers: Dr. Mr. Jack Lubowsky, PhD, PE, Nassau Community College “An Engineer in Congress”
Dr. Edward Lancevich, PhD, Northrop Grumman “Rewards of Engineering Careers”
(See Page 15)

Tuesday, April 25

6:00 pm -8:00 pm : Beyond 3G Wireless
Communications Society — SPEAKER K. Raghunandan (Raghu), Construction Administrator (wireless) New York City Transit. The presentation is to simplify the bewildering set of jargons and claims by different sections of the industry and break it down to layman terms.
(See Page 13)

Thursday, May 18

6:00 pm -8:00 pm : Signals Mixer
Graduates of the Last Decade and Women In Engineering are hosting another trademark “Signals Mixer” tentatively at “Proof” NYC, 239 Third Ave.

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“The Field” The Quest for the Secret Force in the Universe (Lynne McTaggart)

Reviewed by Ken Vought IEEE NY Section Chair

The March 2006 Monitor, carried my review of Lynne McTaggart's “The Field.” That book review raised more questions than it answered. This piece will partially address those questions.

Background:

“The Field” tells the story of a group of frontier scientists who discovered that the Zero Point Field - an ocean of subatomic vibrations in the space between things - connects everything in the universe. “The Field” creates a picture of an interconnected universe and a new scientific theory which makes sense of 'supernatural' phenomena.

“The Field” offers a radically new view of the way our world and our bodies work. It suggests the human mind and body are not distinct and separate from their environment, but a packet of pulsating energy constantly interacting with this vast energy sea.

What is the Zero Point Field (ZPF)?

The Zero Point Field is a background sea of energy comprised of subatomic matter continuously converting back and forth into light. These conversions occur at speeds greater than the speed of light. The ZPF contains vast quantities of encoded information within an invisible web that connects everything in the universe to everything else.

In addition to containing a memory of the universe for all time, the ZPF is a potentially inexhaustible energy source. Within a single cubic yard of “empty space,” ZPF energy could boil all of the worlds' oceans.

Papers published by the scientists written about within “The Field” show the solid, stable stuff we call matter is an illusion. What we see as living, fluid, and solid entities are simply compositions of subatomic particles that are constantly moving within the grip of the ZPF. Therefore, everything in our universe, no matter how heavy or large, near or far, are merely a collection of electric charges interacting with the Zero Point Field.

Why is the discovery of the Zero Point Field significant?

Until now, scientists have subtracted out the extra quantum energy within the ZPF because it was not measurable nor believed to be important. Lately, scientists, from top-ranking

institutions, including Princeton and Stanford University in the US and Europe's prestigious institutions, realized the Zero Point Field has enormous implications.

Astrophysicists have called the ZPF a 'cosmic free lunch'. If successful in harnessing the limitless energy of so-called 'empty space', engineers may be able to create anti-gravity WARP drives and automobiles that run without the use of fossil fuel. It might also open up the possibility of travel beyond our own solar system.

Perhaps more important, the existence of the Zero Point Field implies that all matter in the universe is interconnected by quantum waves. These memory and energy waves are spread through out time and space, and can carry on to infinity, tying one part of the universe to every other part.

Ideas within “The Field” offer unifying scientific explanations for frequently frustrating and conflicting religious beliefs.

Are human beings made of this same basic material?

Human beings, on their most fundamental level, may be packets of quantum energy constantly exchanging information with this heaving ZPF energy sea.

Frontier scientists that were interviewed by Lynne McTaggart had amassed evidence showing that living things emit a weak radiation. Fritz-Albert Popp, a German physicist, discovered that humans emit highly coherent photons - the tiniest particles of light. This may be a most crucial aspect of human biological processes. This may mean DNA uses frequencies of light to drive all the processes of the body.

Other tests show that animals of the same species absorb light emitted from each other. When quantified, this could explain how inaudible communications between animal packs, flocks of birds, and schools of fish are able to achieve instantaneous feats of synchronized fight or flight.

While the foregoing concepts may be fascinating, it is wise to keep in mind the well known dictum that the right idea can never get definitely proven. The best science can hope to achieve is to disprove wrong ideas.

Careerbuilder.com Career Fair

A Review by Alexis Marks, IEEE member

I learned about the job fair through the IEEE-NY P.A.C.E. Update E-Notice and brought my resume to see if anyone was interested. I am completing an engineering degree at CUNY in May of 2006. I haven't been out on the market looking for work for some time, and I figured this would be a good dry run.

The event ran from 10:00 am to 3:00 pm. I arrived at about 12:30, and it was pretty much a madhouse. There weren't a lot of companies there looking for engineers. There were quite a few companies looking for retail/sales people. However, Time Warner was there and so was Bechtel. Halliburton was there too, and I spoke to a recruiter who asked me if I'd be willing to travel overseas. (The idea of working in Iraq as a first job out of school was not that appealing to me). I waited on line for a long time to speak to someone at Time Warner. By the time I got a chance, (almost 40 minutes later), they just directed me to their website.

The Bechtel representative was very polite. He asked me if I knew RF, and we chatted for a little while. He scribbled something on my resume and put it on a very large stack. They look like a very promising company, with a lot of very interesting and exciting jobs for engineers, especially if you're willing to travel--they certainly are global. When I got home, I did check out the websites of Time Warner and Bechtel, and submitted some resumes online.

I did get a call, from a financial services company. I'm not sure how they got my resume because they weren't at the job fair. I think that it was forwarded from a recruitment firm whose name I cannot remember. I will be attending their career session next week. All in all, it was a good experience to get out there and start the ball rolling in my job search. Thanks to the Professional Activities Committee for Engineers (P.A.C.E.), I was able to market myself professionally while being introduced to new companies that are good potential employers.

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Professional Activities for 2006:

Sun, Apr 2 – Engineering EXPO

<http://www.engineeringexpo.org/>

Tue, Apr 11 – SPAC @ Columbia

-Online Career Accelerator Forum

Fri, Apr 21 – SPAC @ Manhattan College

Sat, Apr 29 – Tri-County Tech. Fair

Thu, May 18 – ‘Signals’ Event

*See updated websites for more info:

<http://www.ieee.org/NYS-PACE>

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- Spectrum Tech Alert (weekly)
- The Institute Online Alert (bimonthly)

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****IEEE-USA IN ACTION ** Talent, Techniques, Advanced Tools Key to Future**

Engineering Success, Says IEEE Fellow and Former NSF Official

WASHINGTON (9 March 2006) -- In anticipating the future, we must recognize that civilization is on the brink of a new industrial world order, IEEE Fellow Dr. Joseph Bordogna said during his keynote address at the IEEE-USA Leadership Workshop in St. Louis on 4 March. *“Success will not be garnered by those who simply make commodities faster and cheaper than the competition. They will be those who develop talent, techniques and tools so advanced that competitive capability can be continually robust.”* His address, *Round, Flat or Spiky, the World Turns on an Axis*, provided his vision on how engineers can contribute to future innovation in a world undergoing swift and constant technological transformation. *“Engineers will have to be effective collaborators, innovators, risk takers, and communicators, working across shifting boundaries, and embracing diversity”*, Bordogna said. *“They will need to know the human and social dimensions of technology. Our social and economic progress depends upon it. All of you carry the excitement and the responsibility to make it happen”*. Bordogna, now the Alfred Fitler Moore Professor of Engineering at the University of Pennsylvania, added that creative transformation – the process of converting energy to momentum -- is the flip side of creative destruction: *“That process -- energy to momentum -- which engineers certainly embrace, speaks directly to the excitement and inspiration of integrative 21st century science and engineering innovation at the frontier. Propelled by advances in genomics, materials, computer-communications, and advances in cognition, mathematics and social science, our profession is on the verge of new, exhilarating frontiers.”*

For more information, or to read the entire address, go to <http://www.ieeeusa.org>

-- **IEEE New York Section -- Professional Activities Committee for Engineers --**

Matthew B. Nissen, PACE Chairman Matt.Nissen@ieee.org

Eyal Novotny, PACE Vice-Chairman Eyal.Novotny@ieee.org

Engineering Management Society January 12th Meeting

Quality Assurance Management for the Redevelopment of the World Trade Center Site

On January 12, 2006, the New York Section of the IEEE Engineering Management Society hosted a presentation by Dr. Mewburn Humphrey, P.E., Quality Assurance Manager for the World Trade Center Downtown Restoration Program, on the challenges of managing the



Dr. Mewburn Humphrey, Port Authority of NY & NJ Quality Assurance Manager receiving award from Marty Izaak,(Right) Chairman and Victor Simuoli (Left), Vice Chairman of the New York Section of Engineering Management Society

Quality Assurance Oversight Program for the restoration of the World Trade Center Site. The presentation was held at the Urban Engineers of NY office in the Empire State Building.

Dr. Humphrey is an Executive in the Port Authority of NY & NJ. He is responsible for the Quality Assurance Oversight of the federally funded projects at the World Trade Center site that will be designed and constructed by the Port Authority, and which must meet the requirements of the Federal Transportation Administration (FTA) QA/QC Guidelines. He began his presentation with an overview of the current and planned work on the site, which includes the design and construction of the World Trade Center

Transportation Hub and the Vehicular Security Center and Tour Bus Parking Facility and also briefly discussed the Freedom Tower, the Cultural Buildings and the World Trade Center Memorial.

Dr. Humphrey discussed the challenges, guidelines and procedures involved in establishing and maintaining a QA/QC program, and the structure of the Quality Management System and representative processes that must satisfy FTA requirements, (from design through construction). Dr. Humphrey stressed that the ultimate goal of the QA/QC program is to ensure the delivery of a high-quality product that would achieve the goals and objectives of the client departments of the Port Authority and its customers, meet FTA requirements, and satisfy all stakeholders for generations to come on this high-profile site.

After the presentation, Dr. Humphrey answered questions from the audience and was presented with an award from Marty Izaak and Victor Simuoli, Chairman and Vice Chairman of the New York Section of the Engineering Management Society.

The following is a reprint of an article by Frederik Nebeker that appeared in the July 2005 (Issue 68) IEEE History Center Newsletter. I found it of great interest and am hopeful that it will be equally enjoyed by the Monitor readership.....Mel Olken

Power Outages in the Movies

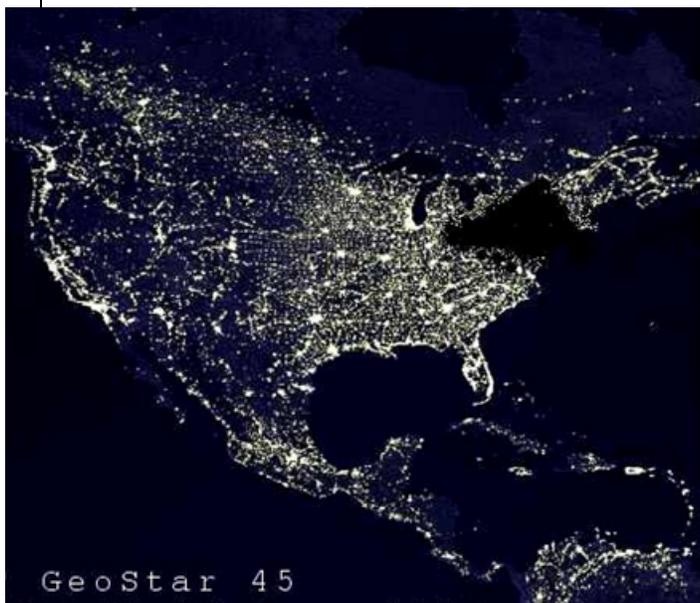
The loss of electric power is a plot device in hundreds of movies. Certainly the visual impact of a blackout is attractive to filmmakers. Think of the aerial view of a progressive power outage in "Close Encounters of the Third Kind" (1977) or the blackout of a large part of Manhattan during a thunderstorm in "Ghost Breakers" (1940). But for dramatic effect, the social disruption usually attendant on a power outage is even more valuable.

Spike Lee's "Summer of Sam" (1999) shows looting and vigilante policing in New York City during the 1977 blackout, and "The Trigger Effect" (1996) depicts the spread of uncivilized behavior when there is a long-lasting power outage. Two early Alfred Hitchcock movies concern the danger to society of power loss: in "Sabotage" (1936) intentional damage to the generators at the Battersea power station causes a London blackout, and in the wartime movie "Saboteur" (1942), Hoover Dam, the source, we are told, of 75 percent of the power to the L.A. area, is targeted by enemy agents.

On a smaller scale, loss of electric power creates suspense in "The Birds" (1963), "Night of the Living Dead" (1968), and other thrillers. (The telephone is usually also out of commission.) In "Titanic" (1997), as the ship is sinking, the loss of electrical power, first fleetingly then permanently, heightens the sense of doom. In a similar way, the power loss during a hurricane creates an ominous mood in the hotel visited by Frank McCloud (Humphrey Bogart) in John Huston's "Key Largo" (1948). Unreliability of electrical power, such as brownouts and intermittent outages, can be a significant aspect of the social setting of the action of a movie, as in "Up at the

Villa" (2000), which takes place in Italy in 1938, and in "Dancer Upstairs", which takes place in South America in the 1990s.

There are many movies in which someone cuts off the power to a building for criminal or other purposes. Some examples are "Pink Panther" (1963), "Terminator" (1984), and "Matrix Reloaded" (2003). In "Tomorrow Never Dies" (1997), James Bond (Pierce Brosnan) shuts off the power, to good effect, in a media-mogul's building, but when an earlier Bond (Sean Connery) tried the same trick in "Thunderball" (1965), he was thwarted because the villain had a back-up generator.



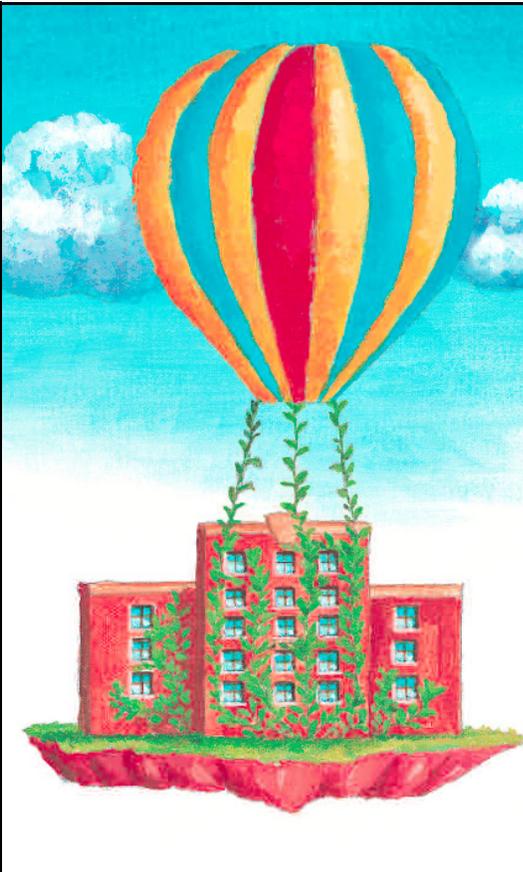
In "Dinner Rush" (2000) a Manhattan restaurant loses its electricity. The restaurant staff carry on—presumably the cooking is done by gas—and put candles on all the tables, creating a romantic mood; when the electric lights come back on later, someone comments that it was better without them. The same thing happens in at least two other movies: Woody Allen's "Husbands and

Wives" (1992) and Joe Mantello's "Love! Valour! Compassion!" (1997).

Engineers can be proud of the fact that, almost always, electric power is taken for granted and that it is an outage that is news. In the Steven King miniseries "The Stand" (1994) it is the starting of a power station that is news: after a global catastrophe, the small number of survivors

achieve a major victory by restarting a power station. And after citing so many examples of power failures, we might recall a movie scene where it is surprising that the power has *not* failed: in the 1959 movie "On the Beach" a power station near San Diego is still operating long after everyone has been killed in a nuclear war.

And, speaking of power outages, the photo accompanying this article was taken from a satellite on August 14, 2003. What happened to the eastern part of the US and Canada?



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IEEE New York Section 2006 Awards Dinner Dance

The IEEE New York Section 2006 Awards Dinner Dance was held on Saturday, February 11th at The New York Hilton Hotel & Towers. The evening began at 6:30PM with cocktails at the Petit and Rendezvous Trianon with dinner and the Award ceremony immediately following at the magnificent Trianon Ballroom. Despite the cold weather and the impending snowstorm the Trianon Ballroom was filled with over 170 people for dinner, the Award Ceremony and the much-anticipated night of dancing.

Several local companies including Alcatel Transport Automation, Alstom Transportation, Altran Solutions, Consolidated Edison Company of New York, Inc., General Electric Company, Lockwood, Kessler & Bartlett, LTK, Mass Electric Construction, NYC Transit Authority, Parsons Corporation/PTG, Port Authority of NY & NJ, Siemens Transportation Systems, Inc., and Systra Consulting helped make the event a great success.

The Award ceremony included the presentation of the distinguished Fellow Award that is conferred by the Board of Directors upon a person with an extraordinary record of accomplishments in any of the IEEE fields of interest. The following were honored by a Grade of Fellow:

- Dr. Dinesh Verma, IBM, for contributions to communications networks management.
- Dr. Kanti Jain, Anvik Corporation, for contributions to high-resolution excimer laser lithography.
- Dr. Andrei Broder, IBM, for contributions to the theory and application of randomized algorithms.
- Prof. Henning Schulzrinne, Columbia University, for contributions to the design protocols, applications, and algorithms.

The Power Engineering Society presented an Outstanding Engineer Award, Mr. John C. Isecke, P.E., Con Edison for outstanding service and leadership, in the area of power engineering as an engineer and manager.

Region 1 Awards were also presented to Dr. Nabil Ghaly, NYC Transit, for technical leadership in the innovation implementation of communication-based train control and Dr. Charles Rubenstein, Pratt Institute, for outstanding leadership and support of the 2005 Long Island Systems, Applications and Technology Conference.

For the first time in the NY Section, Women in Engineering presented their Engineer of the Year award to, Cosema (Connie) E. Crawford, NYC Transit, for leadership across many fields in engineering and for contribution in promoting the recognition of women in engineering.

The evening dazzled, down to the smallest details, which included dessert, a New York sampler with a chocolate NYC subway train car filled with a delicious chocolate mousse.



IEEE New York Section 2006 Awards Dinner Dance



Engineer of the Year award to, Cosema (Connie) E. Crawford, NYC Transit, for leadership across many fields in engineering and for contribution in promoting the recognition of women in engineering.

Outstanding Engineer Award, Mr. John C. Isecke, P.E., Con Edison for outstanding service and leadership, in the area of power engineering as an engineer and manager.



Region 1 Award presented to **Dr. Nabil Ghaly**. Technical leadership in the innovation implementation of communication-based train

Google’s Open House

Review, Darlene Rivera

Google held an open house event in New York for women in engineering on Wednesday, February 1st, 2006 to network and hear about Google and its push to recruit women engineers. Fascinated by Google since it’s founding in 1998, the NY Section WIE committee set forth to see what the open house had to offer.

The evening started out with a buffet meal and drinks where people had the opportunity to network with other female engineers. Two female engineers shared their perspectives on life and work as a female engineer at Google to over 140 attendees.

Corinna Cortes

A senior research scientist at Google, Corinna Cortes works on solving a broad range of theoretical and applied large-scale machine learning problems. Dr. Cortes earned her MS in physics from the University of Copenhagen's Niels Bohr Institute, and her PhD in computer science from the University of Rochester. Prior to Google, Dr. Cortes spent more than ten years as a senior researcher at AT&T Labs – Research (formerly AT&T Bell Labs). She is recognized for her contributions to the theoretical foundations of support vector machines (SVMs), and was awarded the AT&T Science and Technology Medal in 2000 for her work on data mining in very large data sets. Dr. Cortes holds several patents, and has authored or co-authored over 50 research papers. She's also a competitive runner (she placed third in the More Marathon in New York City in 2005), and a mother

Elizabeth Hamon Reid

A senior software engineer at Google, Elizabeth Hamon Reid is the tech lead of the Google Local/Maps front-end team. Ms. Reid joined Google shortly after earning her BA in computer science from Dartmouth College in 2003. She was one of the earliest engineers to work on the Google Local project, playing a major role in the development of almost all its user interface and front-end components. Her most recent accomplishments include leading the Google Local tab launch and leading the integration with Google Maps. Before coming to Google, she had internships at Microsoft and the Dartmouth Medical School Interactive Media Lab. The winner of numerous awards in college, Elizabeth has published a number of research papers and filed two patents since joining Google.

What does Google do?

Google’s mission is to organize the world’s info & make it universally accessible & useful.

Google indexes billions of web documents, more than 3 x its competitors (over 2 billion images, over 1 million UseNet pages, blogs, news, video, etc.).

Google indexes over 35 file types that are *not* HTML documents (Word documents, PDF files, PostScript files etc.) and documents them in 35 languages.

What do engineers at Google do?

There are various opportunities at Google for Software and/or Electrical Engineers. Google engineers:

- Build hardware & software systems
 Google built their own database and created their own programming language to do data analysis.
- Analyze Data (statistical inference)
 Spelling Correction, Machine Translation, Time series prediction
- Create Innovative applications

Engineers are encouraged to develop ideas they may have for applications. Google labs showcases a few of Google’s favorite ideas that aren’t quite ready for final release (Google Suggest, Google video, etc). Many of Google’s current application tools began here such as Google Earth, Google Maps, Google Local and Google Scholar.

For more information about Google tolls available for public use and employment see www.google.com.

IEEE Communications Society NY Chapter Presentation**Beyond 3G Wireless****Tuesday, April 25th, 2006**

In this talk the growth opportunities available for wireless service providers are explored. The talk begins with a quick preview of the 3G technologies used today and explores the new technologies and the opportunities they present. Building on these, possible scenario for future expansion of wireless technology is presented. The engineering parameters and limitations are discussed.

This presentation is intended to for both service providers and equipment vendors yet it takes into account all of us, as cell phone users. The intent is to simplify the bewildering set of jargons and claims by different sections of the industry and break it down to layman terms. The talk will address ground reality of what is possible and what is not practical and will present the restrictions of each technology. It concludes with some recommendations that summarize the needs of both end users and the wireless service providers.

SPEAKER**K. Raghunandan (Raghu)**

Construction Administrator (wireless)
New York City Transit

Raghu worked in the Indian Space Research Organization from 1977 till 1987. From 1987 to 1992 he worked on a European Space Agency project in England. He worked in Bell Labs, Lucent Technologies from 1993 till 2004. Since 2004, he works for New York City Transit, in the Communication wireless department. Raghu has worked in the field of wireless communications specializing in TDMA, CDMA, Satellite Digital

Audio Radio Systems, as well as Access systems and other communication technologies. In 2005 he was granted a US patent in wireless and cable integrated access network. Raghu received the bachelors' degree in Electronic engineering from the University of Mysore (1974), Masters degree in Instrumentation from IIT, Kharagpur (1982) and Research degree in Satellite Communication from the University of Surrey, England (1992). Raghu has several international publications in IEEE conferences and journals. Part of the material described in this talk was presented during a web seminar (conducted by Wireless Week magazine) where Raghu was one of the panelists on the topic of "3G and beyond" held on Nov 17, 2005. He has also delivered lectures at several universities in USA, UK, Malaysia and India.

TIME

Refreshments at 5:30; Presentation 6:00 – 8:00

Advanced registration (by COBD Friday April 21) is required for security reasons. Register by email with rsicilia@ieee.org or check our Web site at <http://www.comsoc.org/~nyc> for registration and last minute details.

LOCATION

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For more information, contact Warner Sharkey, Chairman at cruisingsailor@ieee.org



The Institute of Electrical and Electronics Engineers - New York Section

Student Professional Awareness Conference (S-PAC)

Join the Columbia University IEEE Student Branch and the IEEE New York Section for an evening dedicated to Careers in Engineering!

Location: Carleton Lounge – First Floor Mudd Building, Columbia University
500 West 120th Street, New York, New York, 10027-6623

Date: Tuesday, April 11, 2006

Program:

4:00 PM Registration, Appetizers & Networking

4:30 PM Opening Remarks

4:45 PM **“Winning Resumes” – Andrew Malcolm, Professor, RIT** – Prof. Malcolm has been a member of IEEE (IRE) since 1954 and has published many articles on a number of subjects in IEEE journals. He was general manager of the Indian River Engineer, the newsletter of the Cape Canaveral Section of IRE (1959-1962), general chair of the 1984 IEEE International Professional Communication Conference, member of the IEEE-USA Health Care Engineering Policy Committee (1987-1991), editor for the IEEE-USA Technology Policy Council (1990-1992), and has given one or two S-PAC talks each year since 1995. Since 1972, he taught English to engineering and science students at the National Technical Institute for the Deaf at the Rochester Institute of Technology.

5:30 PM Refreshments and Networking Session *Don't Forget Those Business Cards!*

5:45 PM **Career and Life Management Skills” - Bala S. Prasanna, IBM** – Bala is Chairman of the IEEE New Jersey Coast Section, and has been a volunteer since 1983. He is currently a technical manager at IBM Global Services. His discussion on Work/Life Balance will cover a multitude of topics; including the need for work/life balance, leadership, conflict resolution through negotiation, office politics, networking, finances, handling criticism, the need for making the right choices, and volunteerism.

7:00 PM Discussion Q&A

7:30 PM Closing Remarks

Directions: http://www.columbia.edu/about_columbia/directions.html

Five bus lines (M4, M5, M11, M60, M104) and one subway line (the #1 local) serve the Columbia neighborhood. The M60 bus is a direct link between campus and LaGuardia Airport. The Columbia stop is 116th Street. Do not use express trains #2 and #3, which follow a different route and do not stop at Columbia University; if you do, be certain to transfer at 96th Street to the #1 local.

Campus Map: http://www.columbia.edu/about_columbia/map/MorningsideCampus.pdf

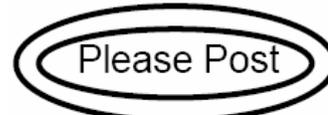
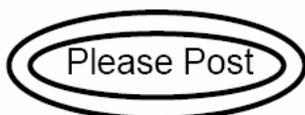
All IEEE members get Free Admission - Please Pre-Register by
March 24, 2006; space is limited.

Online Registration:

<http://www.columbia.edu/cu/ieee/>

Matt Nissen, PACE Chair

Matt.Nissen@ieee.org 212-529-5969 x316



*This program is a Joint IEEE & University Event, and is presented to you by **G.O.L.D** Graduates of the Last Decade, **W.I.E** Women In Engineering, **S.A.C** Student Activities Committee, and **P.A.C.E** Professional Activities Committee for Engineers. Eyal.Novotny@ieee.org*



INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
NEW YORK SECTION
S.P.A.C Student Professional Awareness Conference

Presents an innovative, hands-on look at the engineering industry!

IEEE Science Symposium

Location: **Manhattan College**, Fishbach Room, Leo Engineering Building
Date: Friday, April 21, 2006
Time: 3:30 – 8:30 PM

Agenda

- 3:20 PM Welcome Comments
- 3:30 PM Guest Speakers:
 - Dr. Mr. Jack Lubowsky, PhD, PE, Nassau Community College "An Engineer in Congress"
 - Dr. Edward Lancevich, PhD, Northrop Grumman "Rewards of Engineering Careers"
- 4:30 PM Symposium Information Session, Refreshments
- 6:30 PM Dinner, Thomas Hall, Manhattan College
- 8:30 PM Announcements & Closing

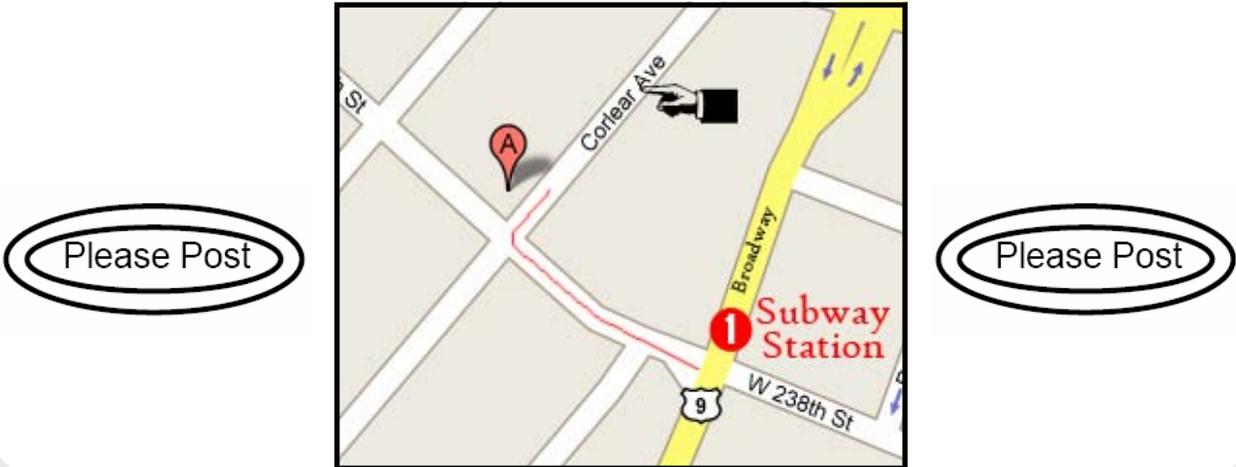
Directions:

Leo Engineering Building, Manhattan College, 3825 Corlear Avenue, Bronx, NY 10463-2348

Subway: 1, 9 train to 238th Street. Walk west one block. Turn right onto Corlear Ave. Leo Engineering Bldg. will be on the left.

Car: I-87 to Exit 11, Van Cortlandt Park South. Turn right onto Van Cortlandt Park S. Continue past the elevated train onto W 240th Street. Turn left onto Corlear Ave. Leo Engineering Bldg. will be on the right.

All are welcome!! Please RSVP at
ieee@manhattan.edu; space is limited!
Chris Barsi, President IEEE – Manhattan College (718)-862-6253
Matthew Nissen, PACE Chairman
Matt.nissen@ieee.org



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Vehicular Technology Society

Real-time Vision for Transit Operations and Security, By Dr. Visvanathan Ramesh, Siemens Corporate Research & *PATH New Signal System*, By Daniel J. Reitz, PATH

April 20, 2005, 6:00 to 8:00 PM
Refreshments and Registration: 5:30PM
Hosted by: Cisco Systems, Inc. 9th Floor
One Penn Plaza, New York City

Dr. Ramesh will give an overview of real-time vision system developments with specific emphasis on **transit security, safety and operations**. Dr. Ramesh will highlight specific technologies for object detection, tracking, and event/behavior analysis and their applications in transportation settings. In addition, Dr. Ramesh will illustrate Siemens' systems engineering

methodology for how performance characterization of such intelligent video analysis functions can be achieved to gauge the applicability of these systems to specific settings.

Daniel J. Reitz a Senior Member of the PATH New Car and Signal System procurement team will give a brief history on the **PATH signal system** – Progressing from relay based logic, to WTC microprocessors, to CBTC and bring us up to date on the PATH New Signal System procurement.

Advance registration is required for admission.

There is a \$35.00 charge for the forum and refreshments, Checks Payable to IEEE NY Section
Mail to Mr. Michael Fitzmaurice Online at <http://www.ieee.org/vtsny>
Parsons
100 Broadway
New York, New York 10005

IEEE Members and non-members may register for the April forum. If you are an IEEE member, please provide your membership number. Program specifics and directions: Online at the VTS NY Website, or contact Mr. Anthony McKenzie at 718 243 3125.

POWER ENGINEERING SOCIETY AND INDUSTRY APPLICATIONS SOCIETY NEW YORK & LONG ISLAND

Lighting & Energy Conservation Program, By the General Electric Company

**JOINT MEETING of the IEEE and Edison
Engineering Society April 18, 2006**
Refreshments will be served

**Location: Con Edison Executive Dining Room,
19th Floor
4 Irving Place, NY 10003**

The featured speaker will be: Adrienne Shulman,
Specification Engineer, GE Lighting.

Topics Include:

- Lamp Types & Selection
- Energy Efficient Lighting
- Quality of Light
- Cost of Energy

- Lumen Maintenance
- HID Electronic Ballasts
- Fluorescent Electronic Ballasts
- Life Cycle of Lamps
- Retro Fit Applications
- NY State Energy Code

NO WALK-INS allowed for security reasons

Call for Advance Reservation to:
Sukumar Alampur @ 914-714-9206
Salampur@ieee.org Jim Nucito @ 856-596-8871 x713 jnucito@pmkgroup.com