National Capital Area SGammer Capital Area

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September-October 2007

Career Fly-In Day Connects Members with Lawmakers

The single best way to influence legislators is to meet with them (or their staff) face-to-face. At the recent Fourth Annual Career Fly-In, IEEE members did exactly that—and they did it well. Four dozen members from 16 states gathered in Washington on a Tuesday afternoon in March for briefings by IEEE-USA, then went to Capitol Hill the next day. They visited congressional offices to meet their legislators, explain the engineering profession, and to discuss H-1B visas, student visas and high-skill immigration.

"The feedback IEEE-USA received from legislators and staff after the visits was very positive," said Rus-See FLY-IN, p. 6

Preparing for Capitol Hill—IEEE-USA briefed Career Fly-In participants, including IEEE members (standing, left to right): Thomas McGonigle, Howard Weiss, Kent Hoffman, Faisal Karmali and Gregory Stanton; (seated) Kenneth Lamm and Bill Anselm.



Volunteers Preparing for IEEE GLOBECOM Conference in November

By Tim Weil

Organizing efforts for The 2007 IEEE Global Communications Conference (IEEE GLOBECOM) are in full-swing. The event will be held in Washington, D.C. from November 26-30 at the Washington Hilton Hotel and Conference Center.

The conference will feature a general symposium and 10 specific symposia, tutorials and workshops, a telecom business forum, and a design and developers forum as well as an enterprise network forum.

Leading up to the conference, 10 subcommittees are working on the technical program, publications,

marketing, student volunteers, event coordination, patronage, business and technical forums, and other areas.

The leadership team involves IEEE Communications Society members and volunteers from local IEEE sections as well as prominent area firms and local universities. At the heart of this organizing effort are the volunteers themselves.

As a testimony to the teamwork, excitement and opportunities that the conference planning is providing, we present the words and ideas of several local volunteers and their contact information.

Don Rickerson, Local Arrangements Coordinator

I have been working with the planning committee since it started in 2005. At that time, the telecom indus-

try was in the dumps and we were wondering if anyone was still going to be in the business in 2007, but things have turned around and we are now expecting a larger turnout then we ever imagined.

For the young and young-at-heart volunteers that we seek to help with the day-to-day activities, this is a great chance to see and meet the leaders and innovators in their respective fields. The volunteers get free admission for the day to the presentation, exhibits, and a free meal. What a deal! Check the volunteer schedule and sign up early to get the position you want.

Anthony Scott, Co-Conference Coordinator

IEEE GLOBECOM has been amazing collaborative effort amongst the volunteers in the IEEE com-See GLOBECOM, p. 6

Robotics Chapter Announces Competition for Students

By Raj Madhavan

A grant has been made under the IEEE Robotics and Automation Society's New Initiatives Competition for the proposal Advancing Robotic Research through an Open Source High-Fidelity Simulation Framework and Competition, with principal investigators Stephen Balakirsky, Raj Madhavan, and Chris Scrapper.

Student involvement will be encouraged through the creation of a factory automation regional competition and tutorial. Under this effort, we are soliciting faculty members and their interested students from universities in the greater Washington area (Washington, D.C., Northern Virginia and Baltimore) working in the areas of multi-agent cooperation, robotic mapping, communications networks, and sensory processing.

From Glasgow to Washington—At the International Conference on Communi-cations (ICC) in Glasgow, Scotland in June, IEEE Communications Society President Dr. Nim K. Cheung (left) joins IEEE GLOBECOM committee members Wally Lee and Jerry Gibbon (general chair) in inviting ICC attendees to Washington for the 50th anniversary of IEEE GLOBECOM in November. ICC is the Communications Society's other flagship conference. Wally Lee and' Monica Mallini staffed a booth at ICC and gave away Capitol dome stress relievers to promote the November conference. The stress relievers were timely, as many of the ICC attendees were anxiously awaiting results of the acceptance of their paper proposals.

See ROBOTICS, p. 7

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EDITORIAL POLICIES

AND PROCEDURES Calendar Announcements

Please submit calendar items in the format used in the Calendar of Events. You can send email to neacscanner@ieee.org. If possible, include a synopsis of the event and a biographical sketch of the presenter including academic background, current position, notable achievements, and IEEE and other professional af-

filiations. **Articles**

Other contributions, such as reports on chapter events and other member activities, are most welcome. Please submit articles to the managing editor at ncac-scanner@ieee.org.

Advertising

Contact the advertising manager about ad rates and to place advertising orders. Ads must be submitted by the deadline below.

Deadlines

The editor reserves the right to set policies and procedures necessary to provide members with a newsletter that is informative and timely. Deadlines must be strictly observed to keep the publication on schedule. If you are planning an event and have insufficient information by the deadline, please contact the managing editor. The deadline for the upcoming issue will always be published on this

November-December issue deadline: October 1, 2007

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*Including Washington, Northern Virginia, and Baltimore Sections and Annapolis Subsection

ON THE WEB

eScanner Calendar of Events

The calendar is available at www.ieee.org/escanner. Check here for events submitted too late for print publication.

IEEE National Capital Area Virtual Community

Exchange ideas and participate in discussions with local IEEE members at www.ieeecommunities.org/nca.

TECHNICAL SOCIETY CHAPTERS AND AFFINITY GROUPS

Technical Society Chapters

Aerospace and Electronic Systems Society (W/NV)

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Antennas and Propagation Society (W/NV)

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Mr. Seddik Benhamida 703-414-4082 sbenhamida@dc.devry.edu

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Electromagnetic Compatibility Society (W/NV)

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Electron Devices Society (NV/W)

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Ms. Fari Schlake 703-473-7883 fschlake@gmail.com http://ewh.ieee.org/r2/no_ virginia/embs

Engineering Management Society (W/NV)

Mr. Doug Holly 240-404-1601 dougholly@ieee.org

Geoscience and Remote Sensing Society (W/NV)

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Magnetics Society (W/NV)

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Nuclear and Plasma Sciences Society (W/NV)

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Oceanic Engineering Society (W/NV)

Mr. Mike Goldberg 703-610-1717 mgoldber@mitretek.org

Power Engineering Society (NV/W) Mr. Jeff McWhirt 703-983-1410

jmcwhirt@mitre.org Reliability Society (W/NV) TBD

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Society for Social Implications of Technology (NV/W/Baltimore)

Ms. Tesa Leon 202-326-6582 t.leon@ieee.org

Vehicular Technology Society, **Land Transportation Committee** Mr. Karl W. Berger, P.E.

703-803-7917 kwb@dcm-va.com

Southern Maryland Communication, Computer and EMC Chapter Mr. Fred Heather

301-342-6975 heatherf@navair.navy.mil

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Women in Engineering (W/NV) Ms. Charity Burd 202-231-1451 charity.burd@ieee.org

m.a.mallini@ieee.org

calendarofevents

Tuesday, September 4, 2007

Washington Section Administrative Committee Meeting

Time:

6:30 pm

Place:

Meeting location TBD, please see www.ieee.org/escanner for updates.

More Info: All interested IEEE members are

welcome.

Contact:

Dr. Kiki Ikossi, Washington Section Chair, at ikossi@ieee.org.

Friday-Saturday, September 7-8, 2007

◆ Teacher In-Service Program (TISP) **Training Workshop**

IEEE Region 2 Educational Activities Department, IEEE Baltimore Section

Time:

Place:

Friday: presentation 4:30-6:30 pm, dinner 7:00 pm;

Saturday: 9:00 am to 4:00 pm BWI Airport Marriott, 1743 West Nursery Road, and Historical

Electronics Museum, 1745 West Nursery Road, Linthicum, MD.

More Info:

See Diamond story, p. 4, and the May-June Scanner, available at www.ieee. org/escanner/Scan07n3.pdf (page 6).

Cost:

Free for IEEE members, \$75 for nonmembers. IEEE will reimburse members for travel-related expenses.

Contact:

For more information on this TISP training session or TISP participation, please contact Doug Gorham, director of educational outreach, at 732-562-5483 or d.g.gorham@ieee.org, or Jessica Czeczuga, project administrator at 732-562-5496 or j.czeczuga@ieee.org.

Saturday, September 8, 2007

Solar House Tour

Nuclear and Plasma Sciences Society,

Power Engineering Society

Time:

10:30 am

Place: LEAFHouse construction site adjacent to Architecture Building, University of

Maryland, College Park, MD

More Info:

Directions: See www.parking.umd.edu/themap. IEEE members and guests will meet

> with the University of Maryland engineering and architectural student team that is designing and building an energy-efficient house for the Solar Decathlon 2007. Their LEAFHouse will be erected on the National Mall in Washington D.C. for the October 12-20 competition. See www.solardecathlon.org and http://solarteam.org for more information about the competition and the LEAFHouse entry. After the LEAFHouse tour, the NPS chapter will

Cost:

Contact:

Harry Sauberman at hsauberman@ieee.org.

provide lunch for attendees.

Tuesday, September 11, 2007

Preparing for CSDP Certification

Sponsor:

Graduates Of the Last Decade (GOLD)

Speaker:

Phanindra Mankale

Time:

Presentation 6:00 pm, light refreshments following the talk at 7:00 pm

Place:

Oracle Building, 1910 Oracle Way,

Reston, VA

Directions: From the Dulles Toll Road, take the exit

More Info:

for Reston Parkway North. Take the first right onto Sunset Hills Rd. Take the next right onto Oracle Way. Phanindra Mankale will talk about how to meet the requirements for the IEEE

Computer Society's Certified Software Development Professional (CSDP)

credential.

Cost: Free for IEEE members or non-mem-

bers. Invite your friends! Important: We must provide a list

Contact:

of attendees ahead of time to Oracle. To attend, you must RSVP no later than Sunday, Sept. 9 to Chuck Baldi at cbaldi@ieee.org or Van Le at vanble@ieee.org. Please bring photo ID.

Wednesday, September 12, 2007

Northern Virginia Section Administrative Committee Meeting

Time:

Place:

Olive Garden Restaurant, 12980 Fair Lakes Shopping Center, Fairfax, VA Take I-66 to Fairfax County Pkway,

Directions:

Route 7100 (Exit 55B towards Reston-Herndon). Turn left onto Fair Lakes Pkwy. Turn left at Fair Lakes Shopping Center, and left again to stay on Fair Lakes Shopping Center to the Olive

More Info:

All interested IEEE members are invited to attend.

Contact:

Debra Meale at 703-492-0047 or nca-admin@ieee.org. Please include the term IEEE in your subject line.

Thursday, September 13, 2007

Using C++ and Design Patterns in **Communications Protocol Software**

Sponsor:

Communications Society (Washington chapter)

Time:

Speaker: Harvey Sugar, Mantaro Networks, Inc. Light dinner and networking 6:30 pm,

presentation 7:00 pm

Place:

Mantaro Networks, 20410 Century Blvd., Suite 120, Germantown, MD

Directions: From I-70, take exit 15B and merge onto Germantown Rd. (Rt. 118) south toward Germantown. After approx. 0.7 mile, turn right at Aircraft Dr., then turn right at Century Blvd.

More Info: See Diamond story, p. 4.

Contact:

Doug Holly at dougholly@ieee.org.

Friday, September 14, 2007

Electromagnetic Compatibility Society Meeting

Time:

Lunch 12:00 noon, meeting 12:30 pm

Place:

Washington Laboratories, 7560 Lindberg Drive, Gaithersburg, MD

Directions: From the beltway in Maryland, take I-270 N. Take Exit 8 to Shady Grove Road East. After 3 miles, Shady Grove Road becomes Airpark Road. Continue 1.7 miles, then turn left onto Woodfield Road (Route 124), then left onto

Lindbergh Drive.

More Info:

Topics to be discussed include chapter activities and officer candidates for 2008. This meeting is in conjunction with the September EMC/Safety Workshop held at the same venue.

Cost:

Free

RSVP for lunch to info@wll.com. Contact:

Thursday, September 20, 2007

GaN-on-Silicon RF Power Devices: **Current State and Future Directions**

Sponsor:

Microwave Theory and Techniques

Society

Cosponsor: Electron Devices Society

Speaker:

Dr. Kevin Linthicum, Nitronex Corp.,

Social period 5:30 pm, dinner 6:00 pm, lecture 7:00 pm

Place:

Time:

American Center for Physics, One Physics Ellipse, College Park, MD

Directions: See www.acp.org/map.html. Ten-minute walk from College Park Metro station (Green line).

More Info:

See www.ieee.org/mtt-wnva and Diamond story, p. 4. All are welcome to attend. Please join the speaker and MTTS members for optional dinner (catered buffet) at the lecture site. This is the first lecture in the MTT-S series for 2007-08.

Cost:

Lecture free; \$15 for dinner.

Contact:

Please RSVP for dinner only by COB Tuesday, Sept. 18 to Roger Kaul at r.kaul@ieee.org or 301-394-4775.

Thursday, September 20, 2007

◆ NEMA—More Than Just Those **Little Gray Boxes!**

Sponsors: Power Engineering Society, Industry

Applications Society

Speaker:

John Caskey, National Electrical Manufacturers Association

Time:

6:00-8:00 pm

Place:

Mitre Corporation, Building 2, 7515 Colshire Drive, McLean, VA

Directions: See www.mitre.org/about/locations/ mitre2_map.html.

More Info: See Diamond story, p. 5.

See CALENDAR, p. 4

CALENDAR, from p. 3

Contact:

RSVP to Fred Pearson at fred.pearson@unisys.com or Jeff McWhirt at jmcwhirt@mitre.org.

Tuesday, September 25, 2007

How to Negotiate with Bullies and Nut Cases Successfully

Sponsor: National Capital Area Consultants'

Network

Phil Marcus Speaker:

Networking 6:00 pm; presentation 7:30 Time:

pm

Olive Garden Restaurant (Tysons Place: Corner), 8133 Leesburg Pike at

International Drive, Vienna, VA

Directions: From I-495, take Route 7 West (Exit 47A) toward Tysons Corner. Merge onto Rt. 7 and turn left at International Drive. Parking garage is behind the

restaurant.

More Info: All IEEE members, consultants and

guests are welcome.

More Info: The Consultants' Network is pleased to continue its series on training with a mini-seminar led by the founder of The Negotiation Pro. See Diamond story, p. 5. All IEEE members, consul-

tants and guests are welcome.

Dinner \$25 (includes entree, bever-Cost: age, dessert, tax & tip). Exact change is

appreciated.

Monica Mallini at Contact:

m.a.mallini@ieee.org.

Wednesday, September 26, 2007

Life Members Meeting: Divestiture of Hughes Aircraft Company in 1953

Life Members Sponsor:

Speaker: Bob Strauss, Life Member Time: 12 noon to 12:45 pm

Dolley Madison Library, 1244 Oak Place:

Ridge Ave, McLean, VA

Directions: Take Exit 46 from the Beltway and

proceed on Route 123 North to McLean, VA, about 2 miles. After crossing Old Dominion Dr., turn left at the next street, Ingleside Ave., and then left on Oak Ridge Ave. The library is on the left.

More Info: Refreshments will be served.

Amarjeet Basra at 703-324-2821 or Contact: amarjeet.basra@ieee.org.

♦ Friday, September 28, 2007

Adaptive Lifetime Control of Actuators

Sponsor: Control Systems Society, Washington

Speaker: Dr. Levent Gökdere, Fairchild Controls

Corporation, Frederick, MD

Time: Lunch 11:30 am-12 noon; presentation

12 to 12:30 pm; discussion 12:30-1:00

Place: Fairchild Controls, 540 Highland

Street, Frederick, MD

More Info: See Diamond story, p. 5.

Contact: RSVP to Haik Biglari at 240-626-9205.

Tuesday, October 2, 2007

Washington Section Administrative Committee Meeting

Time: 6:30 pm

Place: Meeting location TBD, please see

www.ieee.org/escanner for updates.

All interested IEEE members are More Info:

welcome.

Dr. Kiki Ikossi, Washington Section Contact:

Chair, at ikossi@ieee.org.

Wednesday, October 10, 2007

Northern Virginia Section Administrative Committee Meeting

Time:

Place: Olive Garden Restaurant, 12980 Fair Lakes Shopping Center, Fairfax, VA

Directions: Take I-66 to Fairfax County Pkway,

Route 7100 (Exit 55B towards Reston-Herndon). Turn left onto Fair Lakes Pkwy. Turn left at Fair Lakes Shopping Center, and left again to stay on Fair Lakes Shopping Center to the Olive

More Info: All interested IEEE members are

invited to attend.

Contact: Debra Meale at 703-492-0047 or

nca-admin@ieee.org. Please include the term IEEE in your subject line.

Friday, October 19, 2006

◆ Fall Power Fiesta Networking Event

Power Engineering Society, Industry Sponsors:

Applications Society, National Capital Area Consultants' Network, Women

in Engineering, Graduates of the Last Decade (GOLD), Life Members

Time: 5:00-8:00 pm

Place: Chevy's Fresh Mex Restaurant, Ballston

Common Mall, 4238 Wilson Blvd.,

Arlington, VA

Directions: Ballston Common is two blocks south of Ballston Metro station (Orange line).

Turn right at top of Metro escalator, then left on the street, proceed two blocks toward Macy's, turn left and walk toward Ballston Commons Mall. Look for Chevy's on the right.

More Info: Refreshments, soft drinks and door

prizes will be provided and all are welcome. See Diamond story, p. 5.

\$5 for IEEE members, \$10 for guests, Cost:

free for IEEE student members.

Please RSVP to Monica Mallini at Contact: m.a.mallini@ieee.org.

Wednesday, October 31, 2007

Life Members Meeting

Sponsor: Life Members

Speaker: TBD

12 noon to 2 pm Time:

Dolley Madison Library, 1244 Oak Place:

Ridge Ave, McLean, VA

Directions: Take Exit 46 from the Beltway and

proceed on Route 123 North to McLean, VA, about 2 miles. After crossing Old Dominion Dr., turn left at the next street, Ingleside Ave., and then left on Oak Ridge Ave. The library is on the left.

More Info: Refreshments will be served.

Amarjeet Basra at 703-324-2821 or Contact:

amarjeet.basra@ieee.org.

diamond stories

Friday-Saturday, September 7-8, 2007

◆ Teacher In-Service Program (TISP) **Training Workshop**

Started in 2001, TISP features IEEE volunteers developing and presenting technologically oriented subject matter to educators in a professional development or "in-service" setting. This workshop covers how to organize volunteers for TISP and how to bring the program to teachers in your local schools and school districts. The goal of this training session is to impact at least 1,000 pre-university educators in Region 2 and to help IEEE volunteers implement TISP in their local pre-university education communities.

Thursday, September 13, 2007

Using C++ and Design Patterns in Communications Protocol Software

Design patterns and C++ provide better abstraction features than standard C. Unfortunately, these abstraction features are rarely used in high performance real time applications such as network protocol software because of the perception that their overhead and run time costs are too high. This talk examines the actual costs of using C++ and design patterns in networking protocol software and suggests some strategies for reducing run time costs and

Harvey Sugar has over 25 years of experience in systems and software engineering, developing realtime embedded systems primarily for telecommunications and data network products. He has worked with communications technologies including packet switching, optical networking, satellite communications, telephony, and wireless. He has implemented communications protocols including TCP/IP, Frame Relay, ATM, SS7 and Packet Over SONET. Some of his accomplishments include pioneering the use of object-oriented design and C++ programming in developing a software framework for telecommunications test equipment, leading the development of the first production ADSL test set, and developing and implementing algorithms for the first DWDM system that automatically adjusted power levels and gain.

Thursday, September 20, 2007

GaN-on-Silicon RF Power Devices: **Current State and Future Directions**

A GaN-on-silicon platform technology has been developed to provide the performance advantages of GaN combined with the manufacturing advantages of silicon. The Nitronex process technology has been formally qualified for 28V operation and released for production. Extensive reliability studies have been performed yielding demonstrated EA=2.0eV predicting an MTTF of 10E7 hours at 200 C junction See DIAMOND STORIES, p. 5

DIAMOND STORIES, from p. 4

temperatures. The process technology is currently undergoing 48V qualification and will support the production release of a family of high power transistors for WiMAX, cellular and broadband market ap-

Kevin Linthicum is the founder and chief technology officer of Nitronex Corporation, a NCSU start-up incorporated in 1999. Dr. Linthicum is responsible for the materials, process and product engineering activities at Nitronex.

Prior to forming Nitronex, he completed his Ph.D. in materials science and engineering under the direction of Professor Robert F. Davis focusing on the growth of gallium nitride using MBE and MOCVD. He earned his B.S. in materials science and engineering at Virginia Tech in 1993. Prior to pursuing his academic studies, he served in the U.S. Naval Trident Submarine Force from 1980-1988 in the nuclear engineering department.

Thursday, September 20, 2007

♦ NEMA—More Than Just Those **Little Gray Boxes!**

The National Electrical Manufacturers Association (NEMA) has been developing standards for electrical products for more than 75 years. Many people know those little gray plastic boxes as NEMA enclosures. However, NEMA does not manufacture any products. NEMA represents the electrical manufacturing industry and has developed many of the standards we use today. NEMA has been involved with standards ranging from distribution transformer efficiency standards, to communication protocol for medical imaging equipment to household receptacle standards to standards for new LED lighting technologies.

In addition to standards, NEMA publishes nationally recognized market forecasts and statistical reports. NEMA was also instrumental in the creation of the Energy Policy Act of 2005. Today, NEMA is working around the world to reduce counterfeiting of electrical products. NEMA has offices in Virginia, Brazil, Mexico and China.

John Caskey, director of NEMA's Power Equipment Division, will speak about NEMA and the many activities it supports. In addition, he will discuss several of NEMA's efforts in the area of Smart Grid (the electrical grid of the future), intelligent buildings and wind energy.

Mr. Caskey holds an M.S. degree in energy technology from George Washington University and a B.S. degree in physics from George Mason University. He managed some of the largest demand-side management programs in the country when he worked for Pacific Gas and Electric Company in California. In addition, he worked at Dominion Virginia Power for over 16 years promoting new technologies and new programs such as cool storage, real time pricing, geothermal energy systems and electric vehicles.

Tuesday, September 25, 2007

How to Negotiate with Bullies and Nut Cases Successfully

If you enjoyed Phil Marcus' "How to Negotiate with a Real SOB," you will love the next installment of his series on doing business with colorful personalities. These topics will be discussed in a to and fro with the audience, for best retention:

- What should you do before the negotiation be-
- What should you focus on and not focus on at the bargaining table?
- What are the three types of Bullies and Nut
- Why think about the "most favorable alternate outcome"?

- How to deal with situational bullies and nut
- How to deal with the most common tactical bullies and seeming nut cases.
- How to deal with genuine craziness.

Phil Marcus is a Maryland attorney, and a member of the Supreme Court bar and the American Bar Association. He holds S.B. and S.M. degrees, both in electrical engineering, from MIT, and is also "ABD" for a Ph.D. He also holds a J.D. from the University of Maryland School of Law.

He has practiced law both privately and with a Maryland state agency, and currently practices in business agreement and dispute negotiation and intellectual property law (patents, trademarks, copyrights and trade secrets). He is the founder of The Negotiation Pro. Since 1989, he has also owned an IT firm specializing in database software development.

♦ Friday, September 28, 2007

Adaptive Lifetime Control of Actuators

Actuators are key components in aircraft flight control systems. Existing actuator controllers are usually designed to optimize performance and robustness without considering the operational lifetime of the actuator. However, it is desirable to trade off performance for extended lifetime in order to reduce vehicle maintenance cost and improve vehicle safety. In this presentation, adaptive lifetime control algorithms are introduced to achieve optimal trade-off between the performance and lifetime of the electric motors used in electromechanical actuators (EMAs). The lifetime control algorithms are based on linear quadratic regulator (LQR) theory and fuzzy logic rules which take into account (i) mission priority, (ii) lifetime measures of the motor components such as winding temperature and bearing load, and (iii) actuator (or, motor) tracking performance. The effectiveness of the lifetime control algorithms are supported by simulation results.

Levent U. Gökdere received a Ph.D. in electrical engineering from the University of Pittsburgh in 1996. Dr. Gökdere worked as a power systems engineer for Rockwell Scientific Company in Thousand Oaks, CA from 2000 to 2006. Since November 2006, he has been working as a principal electrical engineer at Fairchild Controls Corporation in Frederick, MD. His research and work interests are in controls and power electronics with an emphasis on electric drives and actuator systems.

Friday, October 19, 2006

◆ Fall Power Fiesta Networking Event

In 2005, the local chapters of the Power Engineering Society and Industry Applications Society hosted the first annual Fall Power Fiesta, the premiere networking event of the National Capital Area, attended by 50 IEEE members and guests. The first Fiesta was very successful in that the mix of attendees-students, GOLD members, representatives of industry, consultants, life members-resulted in "a fantastic synergy," as one attendee described the atmosphere. Another said, "I don't believe I have ever attended an IEEE event that had such a great mix of the IEEE community... that was the magic of the evening!" A third person described the Fiesta as "intellectual and social salsa!"

This year, bring business cards and literature, and invite friends, co-workers and anyone else who could benefit from networking with IEEE members. ¡Olé!

Correction

In the Life Members Meeting photograph on p. 6 of the July-August 2007 Scanner, the fourth person from the right is Jim Corrigan (not Eli).

Robotics and Automation Chapter Holds First Meeting

The kickoff meeting of the newly formed Washington Section chapter of the Robotics and Automation Society was held at the Kim Engineering Building at the University of Maryland, College Park campus on

The meeting was well attended (23 people) and the discussion was on the future direction and activities of the chapter. Mr. Leon Escobar was elected vice

The formation of a joint chapter with the Baltimore and Northern Virginia sections is also being explored.

The next meeting will be held in late September (see www.ieee.org/escanner for the date). For more information, contact Dr. Raj Madhavan, chair, at raj.madhavan@ieee.org or 301-975-2865.

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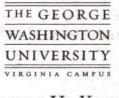
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Bring Us Your



Volunteer Committees Bring IEEE GLOBECOM Conference to Life

GLOBECOM, from p. 1

munity. This year's milestone event, the 50th anniversary of IEEE GLOBE-COM, will be nothing less than spectacular.

Volunteering as the co-conference committee chair has been a wonderful experience. I have volunteered along side some of the most dedicated and intelligent communications engineers in the metro area. From helping the team organize the MANIAC challenge to assisting with coordination for the GOLD event, putting the conference together has been a tremendous group effort and one that we will be proud to present to all who attend in November, especially the IEEE community.

Dennis Moen, Marketing Chair

What a great opportunity it is to be part of the 50th Anniversary of IEEE GLOBECOM. I have been working with the planning committee since the beginning, now approaching three years, when we formulated the strategy for being the host for the conference this year. There have been challenges along the way but we have continued to overcome them, adding new volunteers with new ideas. The dedication of our team will make IEEE GLOBECOM the anniversary celebration it should be: the best.

Vinod Mishra, Federal Marketing Volunteer

I am one of the volunteers working with Dennis Moen as a member of the marketing team. I have helped contact federal departments and agencies, and we have provided conference-related material to federal agency executives and solicited their involvement.

Jerry Gibbon, General Chair

IEEE GLOBECOM is sure to be the crowning event of 2007 for conference goers in the Washington metro community. We have left no stone unturned to make this an activity you won't want to miss. From the Capitol Steps to the 50th Year anniversary salute to the Communications Society, we have taken out all the stops to make this conference a top draw for technically minded members, but also a great opportunity for the technically inspired members in our metro community. Educators, professionals, and managers of the new technologies of communications will want to make this their single most important conference of the year to develop their careers and business program planning.

Tim Weil, Patron Chair

The Patronage Committee has contacted many international and U.S. communications firms to support this impressive milestone event, the IEEE GLOBECOM 50th Anniversary program. This year's conference celebration will be an exciting event, one sure to draw engineers, scientists and leaders from across the globe.

With the generosity of international companies, the year's event will be a showcase event for the communication industry, the IEEE Communications Society, local IEEE sections and chapters, and the volunteers who make it all happen. We invite your business to support the IEEE GLOBECOM conference. Won't you join us?

Volunteer Opportunities

Other committees are headed by Debi Siering (50th Anniversary Celebration), Wally Lee and Monica Mallini (Event Promotion and Co-Conference programs), and Jeff Friedhoffer (Design and Developers Forum).

See www.ieee-globecom.org for more information on upcoming planning meetings and volunteer opportunities, and contact any of the following people to get involved in the conference:

Jerry Gibbon (General Chair) j.t.gibbon@ieee.org

June Leach-Barnaby (Conference j.leach-barnaby@comsoc.org

Debra Meale (Conference Secretary) nca-admin@ieee.org

Don Rickerson (Local Events and **Student Coordinator**) d.rickerson@ieee.org or 703-330-9028

Dennis Moen (Marketing and Federal Agency Outreach) dennis.moen@ieee.org

Tim Weil (Patron Program) trweil@ieee.org

Deb Siering (50th Year Anniversary) siering@ieee.org

Wally Lee (Co-Conferences) w.h.lee@ieee.org

Monica Mallini (Co-Conferences) m.a.mallini@ieee.org

Anthony Scott (Co-Conferences) anthonyscott@ieee.org

Researchers to Discuss Biomarkers at LISA'07

Biomarkers will be one of the topics covered at the third annual IEEE-NIH Lifescience Systems and Applications (LISA'07) workshop to be held in the Lister Hill Auditorium on the NIH campus in Bethesda, Md. on November 8-9. The workshop is cosponsored by IEEE and the National Institutes of Health's Biomedical Information Science and Technology Initiative (see www.bisti.nih.gov/bistic2.cfm).

LISA'07 provides a forum for the advancement of life and health science systems and applications. Global leaders from academia, industry, and government will be invited to address novel technologies and products in the life and health science domains. These invited speakers will address the technological and application issues of biomarkers and surrogate markers.

IEEE cosponsors include the Circuits and Systems Society, the Engineering in Medicine and Biology Society, the Signal Processing Society, and the Instrumentation and Measurement Society. For more information about LISA'07, see http://bsp.csie.nctu.edu.tw/lisa07.

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Conference to Consider Biotech Cost-Benefits

The role technology can play in helping the United States manage health care costs by advancing the diagnosis, treatment and prevention of disease will be examined in a conference at the National Institute of Standards and Technology (NIST) in Gaithersburg, Md. on September 25.

The goal of "Economic Strategy for Health Care through Bio and Information Standards and Technologies" is to emphasize the need to develop a longterm economic strategy for implementing bio and health care information technologies into our health care system. By developing breakthrough biomeasurement, bioinformatics, biologically based and health-information technologies, rising health care costs can be reigned in and quality can be improved.

"The outcome of this conference will benefit patients and society by improving the quality and convenience of care, managing health care costs and increasing access to affordable and effective health care throughout the world," Biotechnology Council Chair Dick Doyle said.

The Biotechnology Council, NIST and IEEE-USA are cosponsoring the event. For more information and to register, see www.itl.nist.gov/Healthcare/ conf/index.htm.

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FLY-IN, from p. 1

sell T. Harrison, Legislative Representative-Grassroots Affairs, IEEE-USA. "Most importantly, the debate over high-skill immigration shifted perceptibly after our event. For the past several months, Congress has been more skeptical of the H-1B program and much more supportive of efforts to reform it. We can't be certain that this shift is due to the efforts of our members, but their efforts certainly helped," he said.

Eighteen of the participants were from Maryland and Virginia, including Bill Anselm, Kent C. Hoffman, Faisal Karmali, Kenneth Lamm, Thomas McGonigle, Paula Sottin, Gregory D. Stanton, David Viel and Howard Weiss

from Maryland. Representing Virginia were Marc Apter, Wolfgang Gruen, Paul Lane, Taek Lee, Amit Nithianandan, Thomas Plavyak, Kambiz Rahnavardy, Maria P. Rodriguez and David L.

IEEE-USA is planning at least two Washington visits days in 2008, one focusing on R&D funding and one on career issues. Look for the dates in future Scanner Calendars of Events or see www.ieeeusa.org.

In addition to organizing Congressional Visits Days, IEEE-USA works with sections and individual members to set up meetings with their legislators at other times (please allow a month for arrangements).



Power System Communications—A joint meeting in June of the Power Engineering Society, Industry Applications Society, and the Washington chapter of the Communications Society was the first of a series exploring the topic of power system communications. Pictured are Monica Mallini, past IAS chapter chair; Wally Lee, Communications Society chapter vice chair; Fred Pearson, IAS chapter chair; Dr. Stanley Klein, guest speaker; and Jeff McWhirt, PES chapter chair. Dr. Klein discussed a toolbox he has developed to facilitate utility automation through the monitoring and control of substation devices under the emerging IEC-61850 standard. The meeting, held at Mitre Corporation in McLean, Va., drew 20 attendees. Photo: Debi Siering.

IEEE Members Coach MATHCOUNTS

In the fall of last year four members of IEEE volunteered to coach "Mathletes" in preparation for the MATH-COUNTS competition in February 2007. MATHCOUNTS is a math enrichment, coaching, and competition program that promotes middle school mathematics achievement through grassroots involvement in every U.S. state and territory.

The volunteers coached students at Poe Middle School and Holmes Middle School in Fairfax County. These schools would not have had the program without the volunteers. As a measure of the success of the volunteer effort for both the schools and the volunteers, both schools have asked that the program be continued this fall and all four volunteers have agreed to do it again.

For the coming year the program at Poe would benefit from an additional volunteer. Also, if more coaches step forward, the program can be expanded to other schools in Northern Virginia that do not have the program. Many schools run the program with their own staff. The intent of the volunteer program is to provide MATH-COUNTS to those schools that do not have a staff-run program.

Each coach commits to about an hour one day a week after 3:00 p.m. The day and exact start time depends on the school. Since most coaches work, the number of coaches at each school is designed to give the coaches the flexibility they need to meet work demands. The program runs from the beginning of October through the middle of February.

This is a fun thing to do. The students are smart and motivated. If you are interested, contact Michael Flicker at *mflicker@ieee.org* and he will tell you what a coach does.

Saj Durrani Honored by Alma Mater

Saj Durrani, an IEEE Fellow and active member of the Washington Section for many years, will be recognized as a Distinguished Engineering Alumnus by the University of New Mexico, Albuquerque, at an awards banquet on September 27. He received a Ph.D. in electrical engineering from the university in 1962.

After completing his doctorate, Dr. Durrani worked at the GE Communications Division in Lynchburg, Va., the RCA Space Center in Hightstown, N.J., and Comsat Labs and Operations Research in Maryland. After that, he spent 18 years with NASA, from 1974 to 1992, at both Goddard Space Flight

Center and at headquarters, and then worked with Computer Sciences Corp. until retiring in 1998.

A few years later, he served as a technical advisor to the Federal Communications Commission (2000-01) and the State Department (2004-05), under IEEE-USA's Government Fellows Program. His other IEEE activities include serving as Chair of the Washington Section (1980-81), President of the Aerospace and Electronic Systems Society (1982-83) and as a Division Director (1984-85).

He is also a Fellow of the Washington Academy of Sciences, and an Associate Fellow of the AIAA.

PCS Members Visit Piscataway Headquarters

By Monica Mallini

On May 31, I accompanied Wally Lee to an Administrative Committee meeting of the IEEE Professional Communication Society at IEEE Headquarters in Piscataway, NJ.

Wally was appointed to the PCS Administrative Committee in 2006, so he attends society meetings two or three times per year. PCS held its spring meeting in Piscataway, affording committee members and guests an opportunity to visit IEEE headquarters.

The headquarters building on Hoes Lane is open to all IEEE members. At the front desk, visitors are given photo ID badges and escorted to a small conference center facility in the basement, which is fully equipped for audio-visual needs and wireless Internet service.

Staff members are available to speak to visitors about a variety of IEEE topics, such as conference management, use of the SAMIEEE database, and publications. The grand tour takes you past rows of technical society offices and through a huge publications warehouse, archiving society magazines from current issues to decades old.

We took Vera Sharoff, Manager of Information Processing in Regional Activities, to dinner to quiz her about the SAMIEEE database, IEEE e-notice service, and other topics of interest to chapter support volunteers. Yera explained that the e-notice service can be used to select recipients from a variety of criteria. For instance, if one needs to notify Life Members of an upcoming event, an e-notice can be sent to all members with a "Life Member" or related grade. The sender need only use the "Notes" field to explain the selection criteria. This allows our Washington and Northern Virginia society

ROBOTICS, from p. 1

The participants will be provided with the necessary equipment and knowledge needed to join the robotics and automation research community in the area of automated guided vehicles. A two-day tutorial will be provided, during which the participants will be loaned a simulation platform with all relevant software installed.

A call for participation is available at www.ieee.org/escanner/RAS-NIC.pdf. If interested, please contact us as soon as possible with a succinct statement of how you expect to benefit from your participation and why you should be selected (emphasize skills and experience with respect to the requirements of the competition).

If selected, you are expected to attend a two-day tutorial at the National Institute of Standards and Technology (NIST) on September 13-14, 2007.

The competition is being administered under the auspices of the recently formed Washington chapter of the IEEE Robotics and Automation Society. For more information, contact Dr. Stephen Balakirsky at robosim@nist.gov or 301-975-4791

chapters to better serve their members.

Returning from Piscataway, be sure to go south on the New Jersey Turnpike. If you see New York on your right, as we did, you are driving away from Washington! Piscataway is a good place to hold an IEEE conference, but when it's time to come home, happiness is Hackensack in the rear view mirror.



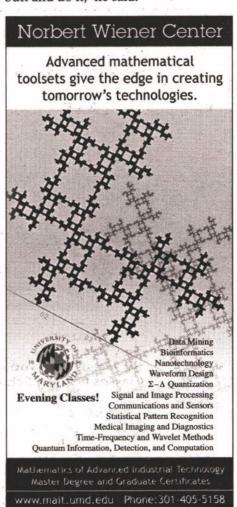
Jim Jenkins and Charles Lord

Consultants Market Services by Offering Technical Training

Jim Jenkins, executive director of the Applied Technology Institute, and Charles Lord of Triangle Advanced Design and Automation, were guest speakers at a National Capital Area Consultants' Network meeting in May.

The two discussed their experiences as technical trainers. Mr. Jenkins emphasized that training is a good way for consultants to market themselves as a reputable and recognized experts.

Mr. Lord, who got into training as an IEEE volunteer, offered advice on how to get started in the field. "Start simple: present a conference paper, be a membership development chair, develop a short workshop. Just get up off your butt and do it," he said.



Northern Virginia Section Ballot 2008 Administrative Committee

IEEE members in the Northern Virginia Section may vote for section officers by mailing this ballot by October 26, 2007 to:

> IEEE National Capital Area, Attention: Debra Meale, P.O. Box 6814, Woodbridge, VA 22195-6814

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ba	ur name and member number are or llot and will be separated before the mmittee.	
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	☐ Kerry Hartman	
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3.	Secretary:	
	☐ Charles Baldi	
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4.	Directors (choose 4):	
	☐ Laura J. Black	
	☐ Afzal Khan	
	□ Deeba Khan	
	☐ Hameed Jamarussadig	
	□ Write-in	Care State Control of the Control of
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Senior Members

Congratulations to the following new Senior Members in the Northern Virginia (NV) and Washington (W) Sections:

Stephen Balakirsky (W) William Chimiak (W) John Evans (NV) Leonardo Hillkirk (W) Tareq Hoque (NV) Diana Joch (NV) Thomas Knight (W) D. Thomas Lang (NV) Ali Mehrabi (NV)

Thomas Murphy (W) Tony Ng (W) Gang Qu (W) William Shvodian (NV) Mary Tobin (W) Zachary Upton (NV) Sandy Weininger (NV) Marilyn Wun-Fogle (W)

If you are interested in becoming a Senior Member, please consult www.ieee.org/seniormember for qualification requirements. For help with references, contact Monica Mallini at m.a.mallini@ieee.org for Northern Virginia Section members, or Kiki Ikossi at ikossi@ieee.org for Washington Section members.

IISc Alumni Prepare to Celebrate Centenary

By Brian Sequeira Past Chair, Baltimore Section

The Indian Institute of Science (IISc) celebrates its centenary next year. The Indian Institute of Science Alumni Association of North America (IISc AANA) has been formed to celebrate this event and establish ties with our alma mater.

IISc AANA is reaching out to alumni on this continent to join its ranks and access the many benefits that are listed at www.iiscaana.org. Alumni are encouraged to download a membership form from www.iiscaana.org/ images/member_sign_up_form.pdf and follow the instructions provided therein to join the organization.

IISc AANA is starting a chapter in the North East Atlantic region, which includes the six New England states, the District of Columbia, Delaware, Maryland, New Jersey, New York, Pennsylvania, and Virginia. Dr. Nikhil Gupta, Dr. Sasidhar Tadanki, Dr. Madhavi Ganapathiraju, and Dr. Brian Sequeira have volunteered to assist in its formation. Alumni may contact any of the above volunteers by e-mailing neastcoast.chapter@iiscaana.org. We request that you inform other alumni of this initiative.

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