Volume XXXII, Number 1

THE ORLANDO SECTION MONTHLY

A Monthly Publication of the IEEE Orlando Section

August 1998

Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.
Members are encouraged to invite and bring guests to these events.

Power Engineering Chapter Meeting

Sponsor: PE/IA/PEL chapter

Place: Sheraton Orlando North Hotel (Maitland Center)
600 North Lake Destiny Drive
Maitland, FL

Directions: From I-4 take Maitland Exit (2nd one traveling northbound) and head west to the intersection at N. Lake Destiny Dr. Enter Maitland Center on the right and hotel will be on your right.

Date: Tuesday, September 8, 1998

Time: 6:00 - 9:00 PM
Dinner served at 6:15 PM
Speaker will begin at 7:30 PM

Cost: $10.00 per person for $25 meal
(Chapter will subsidize $15 per meal).

Menu Selection: Sunshine Pasta:
Chicken in a Lite Wine Sauce over Linguini Pasta, Accompanied with Capers, Fresh Basil, Olives, Scallions, Diced Tomatoes, and a Hint of Garlic

Reservations: Respond by September 4th to:
Bob Gray (407)-281-3269 or
Gary Engmann (407)-419-3521 to reserve a place for Dinner.

Networking Meeting

Sponsors: Consultants' Network and PACE

Program: This network meeting will consists of an open forum where a panel of consultants will be available to answer questions or concerns about consulting from the attendees. Also, the most frequently asked questions about consulting will be presented. This meeting is open to consultants as well as "want to be consultants."

Date: Tuesday, August 11 , 1998

Time: 6:00 PM - 7:30 PM

Refreshments: Soda and Pizza

Location: Orange County Library, 3rd Floor.

Reservations: Jorge Medina 260-1676, ext. 002, Email: j.medina@ieee.org

Note: See page 4 for video review course for FE/EIT and PE Exams

IEEE SUMMER SPLASH BASH!

Watch the next issue for details!

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Published by the
IEEE ORLANDO SECTION

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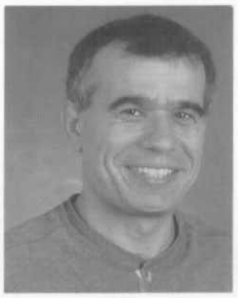

Dr. Christos Christodoulou, Section Chairman

CHAIRMAN'S CORNER

It is indeed an honor to serve as the IEEE Orlando Section Chair. Unfortunately, I have accepted the position of Chair of the Electrical. and Computer Engineering Department at the University of New Mexico so I will be moving to Albuquerque in January. Since I will be busy with other things, I decided to step down as a Chair of this Section and allow **Dr. Al Berg** become our new Chair.

I would like to take this opportunity to thank our outgoing Chair, **Dr. Takis Kasparis**, for his outstanding contributions during his tenure. During this past year, under the leadership of **Dr. Parveen Wahid**, the section sponsored the IEEE SoutEastCon 98 (April). It was a very well organized conference that involved many volunteers and a lot of hard work. The student competition was perhaps one of the best in years that the SoutEastCon has seen. Special thanks to **Shawn Ortiz** for handling the student competition in such a professional manner. The Section has also sponsored a workshop on JAVA at UCF. It was a big success, thanks to **Drs. Guha** and **Vemulapati**.

This coming year UCF will be sponsoring two international conferences. The international symposium on Circuits and Systems (ISCAS), in May 99, and the Antennas and Propagation/URSI meeting, in July 99. Both conferences will be held in the Orlando Renaissance Resort Hotel.

On the social side Wet'N' Wild is again on the schedule, a summer picnic, a Christmas party and the awards banquet as well.

In closing, I would like to thank all my colleagues for the many good years I have enjoyed with the Orlando Section and the local chapters. It would like to ask everybody to support **Dr. Al Berg** as he takes the helm for our Section so we can have another great and productive year. ♦

Finished Grad School? Here's What Companies Deem You're Worth

Did you finally get that master's you've been working on? Are you considering a graduate degree? What is your advanced degree worth these days, anyway?

IEEE-USA's Workforce Committee recently released figures showing the 1998 average beginning salary offers for engineers and computer scientists. IEEE-USA bases its information on surveys the National Association of Colleges and Employers (formerly the College Placement Council) conducts annually.

Here's a summary of starting salary offers for electrical, electronics and computer engineers:
Master's degree candidates (by curriculum): Electrical and electronics engineering: $49,792 ; Computer science: $47,270;
Doctoral degree candidates (by curriculum): Electrical and electronics engineering: $69,750.

IEEE AND ABET SEEK PROGRAM EVALUATORS

The IEEE Educational Activities Board is now accepting applications for program evaluators for engineering and engineering technology programs at U.S. colleges and universities. The application deadline is October 30, 1998. Candidates sought are engineering professionals from industrial, government and academic sectors.

The goal of prospective evaluators is to assess the quality of engineering education. Selected applicants attend a one-day training session, sponsored by the IEEE, that explains the IEEE/ABET accreditation process. Following training, evaluators are prepared to assist with program evaluations that take place each fall and generally run for two to three days.

Nomination packages are available from: Accreditation Administrator, IEEE Educational Activities, 445 Hoes Lane, Piscataway, NJ, USA 08855-1331; tel:732.562.5484; e-mail: "accreditation@ieee.org" or via the World Wide Web; for engineering: http://www.ieee.org/eab/accredit/eval1.html; for engineering technology: http://www.ieee.org/eab/accredit/eval2.html ♦

ELECTRICAL ENGINEERING REVIEW COURSE FOR PROFESSIONAL ENGINEER EXAMINATION

(PE EXAM)

TOPIC OUTLINE FOR FALL 1998

DATE		TOPIC*	INSTRUCTORS
Monday	9/14	Digital/Computers	Dr. R. N. Miller, Ph.D., PE
Wednesday	9/16	Circuits	Dr. Belkerdid, PE
Monday	9/21	Circuits/Communications	Dr. Belkerdid, PE
Wednesday	9/23	Transformers, S-C Calculations	Mr. Joe Skala, PE
Monday	9/28	Industrial Power	Mr. Joe Skala, PE
Wednesday	9/30	Motors/Generators	Dr. Batarseh
Monday	10/5	Controls	Dr. Qu
Wednesday	10/7	Controls	Dr. Qu
Monday	10/12	Electronics	Dr. Batarseh
Wednesday	10/14	Electronics	Dr. R. N. Miller, Ph.D., PE

TIME: 6:00 - 9:00
PLACE: ENGINEERING ROOM 288

Registration Fees: $350

For registration information, please contact Ms. Lillian Phelps at (407) 823-6074.

* TOPICS MAY BE INTERCHANGED DEPENDING ON INSTRUCTOR AVAILABILITY

IEEE-USA THIS WEEK Debuts on the Web

IEEE-USA has launched a new biweekly Web supplement to its print newsletter, IEEE-USA PERSPECTIVES. IEEE-USA THIS WEEK will serve as a timely source of career and public-policy news and information for U.S. professionals in the electrotechnology and information-technology communities.

"Like a good pizza delivery service, we'll bring you the tastiest news fast, hot and fresh" said editor Lee Stogner. "And we'll use the capabilities of the Web to create an open forum on the vital issues of interest to technical professionals."

In addition to news and feature articles, IEEE-USA THIS WEEK contains an expanded "News Bytes" section, an "Ask the Experts" feature, and links to other useful resources. The site also includes a "Reader's Forum" where members can share their views on hot topics. New editions will appear every two weeks, and previous issues will be archived.

Readers can check out the current issue at <http://www.ieeeusathisweek.org>. Those wishing to contribute articles or serve as field editors may contact Lee Stogner at <mailto:l.stogner@ieee.org> or Assistant Editor Ray Dora at <mailto:Raymond_P_Dora@res.raytheon.com>.

IEEE-USA promotes the careers and public-policy interests of the 220,000 U.S. members of The Institute of Electrical and Electronics Engineers Inc., the world's largest technical-professional society.

IEEE CALLS FOR 1999 IEEE HEINRICH HERTZ MEDAL NOMINATIONS

The IEEE Awards Board has opened nominations for the 1999 IEEE Heinrich Hertz Medal. Sponsored by the IEEE Foundation, the medal is one of the highest awards bestowed by the IEEE Board of Directors. It is presented to an individual in recognition of outstanding achievements in hertzian (radio) waves. The award consists of a gold medal, bronze replica, certificate and a cash prize.

The deadline for submission of nominations is 1 October 1998. Members can obtain and submit nomination forms through the IEEE Awards/Fellow Activities Web site at www.ieee.org/awards.Forms also can be obtain and submitted by email to awards@ieee.org. Printed nomination forms also are available.

The Awards Web site provides more information about the IEEE Heinrich Hertz Medal, including a list of past recipients, and information about all other Institute-level awards.

Address questions to: IEEE Awards Department, 445 Hoes Lane, Piscataway, NJ, USA 08855-1331; tel. 732-562-3840; fax. 732-981-9019.

Contact: Marsha H. Longshore
732-562-6824(voice)
IEEE Corporate Communications
732-981-9511(fax)
m.longshore@ieee.org
http://www.ieee.org/newsinfo ♦

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THE ORLANDO SECTION MONTHLY

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EVENTS CALENDAR

For the latest information contact the IEEE Orlando Voice Information Center (407) 260-1676, FAX: (407) 260-1636
E-mail: j.medina@ieee.org - Web Page: http://www.parkave.net/business/ieeeorlando

Aug 04	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. C. Christodoulou 407-823-5831, cgc@ece.engr.ucf.edu
Aug 11	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Sep 01	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. C. Christodoulou 407-823-5831, cgc@ece.engr.ucf.edu
Sep 08	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Sep 08	6:00 PM	PE/IA/PEL - **Chapter Meeting** - Sheraton Orlando North Hotel, B. Gray 407-281-3269 or G. Engmann 407-419-3521
Oct 06	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. C. Christodoulou 407-823-5831, cgc@ece.engr.ucf.edu
Oct 13	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Nov 03	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. C. Christodoulou 407-823-5831, cgc@ece.engr.ucf.edu
Nov 07-13		Computer - **Supercomputing '98** - Orange County Convention Center, Orlando
Nov 10	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Dec 01	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. C. Christodoulou 407-823-5831, cgc@ece.engr.ucf.edu
Dec 01-04		LEO - **LEOS '98** - Walt Disney World Swan Hotel, Orlando
Dec 08	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org

The Orlando Section Monthly **- Advertisement Rates**

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	$450	$390
Full Page	8 x 10.5	$300	$255
3/4 Page	8 x 7.5	$255	$225
2/3 Page	8 x 7 or 5 x 10.5	$225	$195
Half Page	8 x 5	$195	$165
1/3 Page	8 x 2.75 or 2.25 x 8	$165	$135
1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
1/6 Page	4 x 3 or 2.25 x 5	$80	$72
Business Card	3.5 x 2.25	$50	$35
Two Page Preprinted Insert	16.95 x 10.95	$292	$252
Full Page Preprinted Insert	8.45 x 10.95	$195	$165

Please call the IEEE Orlando Voice Information Center to place your ads or mail your camera ready material and payment to:
IEEE Orlando Section, 385 Commerce Way, Suite 109, P.O. Box 521917, Longwood, FL 32750, (407) 260-1676, Fax: (407) 260-1636

VIDEO REVIEW COURSES FOR THE FE/EIT AND PE EXAMS

Through a special arrangement with the IEEE Orlando Consultants' Network, Engineering Update Institute (EUI) is providing video review courses for both the FE/EIT and PE Exams for viewing by members.

The General Engineering Review Course for the FE/EIT Exam includes 18 three-hour lessons. Each lesson is presented on two 90-minute tapes, along with a manual/workbook.

The Electrical Engineering Review Course for the PE Exam includes the following 15 six-hour lessons. Each lesson is presented on two 3-hour tapes, along with a manual/workbook.

The first videotape of each lesson includes Review and Examples. The second videotape features working and solving Typical exam Problems on that subject. A nominal fee will be charged for viewing the tapes. To follow the videos each participant will purchase a manual/workbook and a Reference Handbook (the only open book allowed at the exam) from the IEEE Orlando Consultants' Network.

For additional information contact Mr. Jorge Medina of the IEEE Orlando Consultants' Network (407) 260-1676 or Dr. Gary Blank of the Engineering Update Institute (847) 464-4007

Volume XXXII, Number 2

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IEEE END OF SUMMER SPLASH BASH!

at Wet'n Wild
Saturday, October 3, 1998

See page 3 for details

Networking Meeting

Sponsors: Consultants' Network and PACE
Program: The IEEE Orlando Consultants' Network is inviting each and every one of its members to present a briefing on his consulting practice. The following member has been invited to present an overview of his consulting background and services at this meeting.
Speaker: *Mr. Luciano Castro* of L& S Telecom, Inc. is a consultant who has more than 20 years of experience in telecommunications ranging from traffic engineering to installation and customer training. Also, has over seven years of logistics engineering experience (aerospace). Both areas of expertise have covered international responsibilities and have been coupled with strong marketing activities. Mr. Castro can be contacted at P.O. Box 41669, Melbourne, FL 32941-0669, Tel: (407)784-9647, Fax: (407) 784-4994, Email:lgcastro@digital.net.
Date: Tuesday, September , 1998
Time: 6:00 PM - 7:30 PM
Refreshments: Soda and Pizza
Location: Orange County Library, 3rd Floor.
Reservations: Jorge Medina (407)260-1676, ext. 002, Email: j.medina@ieee.org
Note: See page 4 for video review course for FE/EIT and PE Exams

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Dr. Albert Berg, Section Chairman

CHAIRMAN'S CORNER

It is indeed an honor to serve as Chairman of the IEEE Orlando section. Please join me in wishing **Dr. Christos Christodoulou** the best in his new position as Chair of the Electrical and Computer Engineering Department at the University of New Mexico and in thanking him for his service to the IEEE Orlando section. It is my goal to make IEEE membership and the IEEE Orlando section more relevant to our members. We are in need of fresh and innovative ideas. Please consider becoming involved and giving a little of your talents and expertise back to our profession. If you can help, please contact me or the chapter chair in your area of interest.

We have our most popular event, the annual *Wet&Wild Splash Bash*, coming up on Saturday, October 3 and I am looking forward to seeing many of you there. It is a great chance to get together with family and friends and enjoy good times and plenty of food. Hope to see you there!

A note to chapter chairs: please make every attempt to attend the EXCOM meetings or to send your vice-chair. We need your innovative ideas to boost interest, particularly among our members in industry. Also, please remember to send your meeting reports to our section secretary **Dr. Gerald Holst**. We need them for the annual report and our funding is based in part on our ability to show that our chapters are active. Also, please make sure that your contact information is up to date, and if it is not, please Email or call **Jorge Medina** with any updates. ♦

IEEE-USA Offers Free Electrotechnology Career Vitality Packets

IEEE-USA has released a free career vitality packet outlining its extensive career-development and employment-assistance services for professionals in the electrotechnology and information-technology communities. The packet is designed to serve human resource professionals as well as individual students, IEEE members and other electrical, electronics and computer engineers and computer scientists.

The packet's contents include detailed information on the Engineers Guide to Lifelong Employability, the IEEE-USA Salary Survey and personal Salary Benchmarks workbook, IEEE-USAs employment and job-listing services, and the National Directory of Electrotechnology and Information Technology Consultants, plus a free copy of Today's Engineer magazine -- the only publication devoted exclusively to the professional development of engineers of all disciplines.

Recipients of the packet will learn about a range of IEEE-USAs career and employment services that can help technical professionals develop greater career vitality. These programs include the nation's number-one electrotechnology job listing service (with a new entry-level section), an alliance of local consultants' networks, career workshops, resume-referral services, job fairs, free employment assistance for IEEE members, and a series of career-oriented papers, guides and resource materials for technical professionals and their employers.

To request a career vitality packet, contact Mike Chaykovsky at 202-785-0017, ext. 337, or mailto: m.chaykovsky@ieee.org. For additional information on IEEE-USA's career and employment resources, see URL <http://www.ieeeusa.org>. ♦

Wet'n Wild

6200 International Drive, Orlando, Florida 32819 • (407) 351-1800 Fax (407)363-1147 • www.wetnwild.com • e-mail: wnwflsales@aol.com

I.E.E.E. END OF SUMMER SPLASH BASH

At *Wet'n Wild*

Saturday, October 3, 1998

Adults: $13.00 ($16.00 after September 30)

Children 3-13 years: $7.00 ($10.00 after September 30)

All you can eat hamburger, hot dog and chicken cookout with all the fixings served from 12:30 P.M. - 1:30 p.m. in your reserved area.

Your Special Day Includes:

- All day admission from 10:00 a.m. - 6:00 p.m.
- FREE unlimited soft drinks from 11:30 a.m. - 4:30 p.m.
- Parking $4 per car.

For tickets and information please contact:
Dr. Al Berg at 365-2214, Email: aberg@gdi.net
or Jorge Medina at 260-1676, Email: j.medina@ieee.org

See you there!

Wet'n Wild

Season passes and other discounts not valid. Coolers are welcome, but glass and alcoholic beverages may not be brought into the park. Appropriate bathing suits required. Cotton or denim shorts, cut-offs, or any items with metal fasteners, rivets, zippers, or buckles are not permitted on the rides.

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Sep	**08**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Sep	**08**	6:00 PM	PE/IA/PEL - **Chapter Meeting** - Sheraton Orlando North Hotel, B. Gray 407-281-3269 or G. Engmann 407-419-3521
Oct	**03**	10:00 AM	Orlando Section - **IEEE End of Summer Splash Bash** - Wet'n Wild, Dr. A. Berg 407-365-2214, aberg@gdi.net
Oct	**06**	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
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Dec	**01- 04**		LEO - **LEOS '98** - Walt Disney World Swan Hotel, Orlando
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1/6 Page	4 x 3 or 2.25 x 5	$80	$72
Business Card	3.5 x 2.25	$50	$35
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Volume XXXII, Number 3

THE ORLANDO SECTION MONTHLY

A Monthly Publication of the IEEE Orlando Section

October 1998

Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.
Members are encouraged to invite and bring guests to these events.

IEEE END OF SUMMER SPLASH BASH

At *Wet'n Wild*

Saturday, October 3, 1998

Adults: $13 ($16 after September 30)
Children 3-13 years: $7 ($10 after September 30)

All you can eat hamburger, hot dog and chicken cookout with all the fixings served from 12:30 p.m. - 1:30 p.m. in your reserved area.

Your Special Day Includes:

- All day admission from 10:00 am - 6:00 pm
- Free unlimited soft drinks from 11:30 am - 4:30 pm
- Parking $4 per car.

For tickets and information please contact:
Dr. Al Berg at 365-2214,
Email: aberg@gdi.net
or
Jorge Medina at 260-1676,
Email: j.medina@ieee.org

See you there!

Tour of the Lucent Technologies Facility

Sponsor: PE/IA/PEL chapter

Topic: Introduction to the manufacturing process and the power distribution system followed by a tour of the plant and of the plant's power distribution system.

Speaker: Dr. Vik Saxena, Ph.D., and Allen Liang, Plant Electrical Engineer, of Lucent Technologies, Orlando Works.

Directions: From I-4 take the John Young Parkway exit and head south past Sand Lake Road. Turn left into the first plant entrance and go 1/2 mile. The plant is on the right. Park and go into the main entrance.

Date: Tuesday, October 13, 1998

Time: 6:00 - 8:00 PM

Reservations: Attendance is limited to 30. Please call or e-mail Ken White (407) 419-3525 or whitekd@bv.com with your reservation. Due to the sensitive nature of the manufacturing process, Lucent has requested that your reservation include your social security number. If you are not a U.S. citizen please indicate your country of citizenship when making your reservation. All reservations must be made by October 8.

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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Hello, is anybody out there? Does anybody really read this column? Let me know! By the time you read this, it will almost be time for our annual *IEEE Wet 'n Wild Splash Bash*, by far the most popular IEEE event in Orlando. I hope you have your tickets by now, but there should still be some left. If you haven't gotten your tickets yet, see **Dr. Kalpathy Sundaram** at UCF or call **Jorge Medina** at 260-1676 to order by phone.

By the way, have you taken advantage of any of the numerous IEEE resources on-line? Check out the IEEE-USA Legislative Action Center at

http://congress.nw.dc.us/ieee

It is full of useful information and a great way to make your voice heard in Washington. Also, if you haven't ordered your free Career Vitality Packet, send an E-mail to

m.chaykovsky@ieee.org

Don't forget the Orlando Section Web page at

http://www.parkave.net/business/ieeeorlando

Chapter chairs - take advantage of this resource to advertise your chapter's activities or post items of interest to your members. See you at Wet 'n Wild. ♦

ALL ABOUT AFFINITY GROUPS

Affinity Groups are IEEE's newest means of encouraging programs at the local level. At the June '98 meeting of the Regional Activities Board, approval was given for creation of a new entity called Affinity Groups. They are designed to address non-technical or professional interest areas and operate in many of the same ways as the Technical Chapters of IEEE Societies. By meeting the requirements for establishment and maintenance, Affinity Groups would be eligible for $150 annual allowance per Group, disbursed from RAB funding to the Section as part of the Section Rebate, to administer in support of operating expenses. The currently recognized interest group parents are: Graduates of the Last Decade (GOLD), Women in Engineering (WIE), and the Consultants Network.

IEEE-USA JOB LISTING SOLIDIFIES #1 RANKING

Only months after IEEE-USA's Job Listing Service (JLS) ranked number one in usage in an ELECTRONIC ENGINEERING TIMES reader survey, the JLS has received fresh kudos in a new book for job seekers. In the "Top Job Databases on the Web" section of Pam Dixon's Job Searching Online for Dummies, the author cites the site's ease of use and "rich content." The popular "for Dummies" book series by IDG Books Worldwide has more than 50 million books in print. The item on the JLS includes a shot of the actual IEEE-USA Employment Services Web page, which the author calls an "absolutely top-of-the-line techie site...I found great jobs." The jobs site can be found at URL <<http://www.ieeeusa.org/jobs.html>. ♦

AN INVITATION TO ATTEND THE

1998 HIGH VOLTAGE WORKSHOP

OCTOBER 20-22, 1998 HILTON HOTEL DAYTONA BEACH, FL

The Advisory Group on Electron Devices (AGED) and the Dielectric and Electrical Insulation Society of the IEEE extend an invitation to specialists in the high voltage technology area to attend the 1998 High Voltage Workshop. This workshop is under the technical co-sponsorship of the IEEE Dielectric and Electrical Insulation Society (DEIS).

TECHNICAL PROGRAM

The 1998 High Voltage Workshop will continue the tradition of providing a forum for High Voltage Technology issues in defense and commercial applications. The purpose of this workshop is to facilitate technical exchange of generic (multi-industry) high voltage technology related to practical issues of design, manufacture, packaging, testing, failure analysis, etc. This is a unique workshop intended specifically for researchers, test engineers, manufacturers, suppliers and all technologists who are concerned with designing, fabricating, specifying or utilizing various types of high voltage equipment whether it be used in airborne, marine or terrestrial environments. The technical program , including invited presentations, will be conducted in serial sessions which will be based upon, but not limited to, the following topics.

-High Voltage Electronics	-High Voltage Testing	-High Voltage Analytical Methods
-Insulation Selection	-Partial Discharge Testing	-High Frequency Breakdown
-Packaging Techniques	-Measurements/Diagnostics	-Prebreakdown Processes
-Insulation Aging	-High Voltage Switching	-Insulation for Space Applications

A workshop-like atmosphere will be encouraged at all times. Technical information exchange regarding discussions of earlier presentations or related work-in-progress is encouraged during the Question/Answer periods. Attendance at the 1998 Workshop will be unrestricted and all sessions will be unclassified.

SOCIAL PROGRAM AND TOURS

Planned evening activities include a Banquet, during which the High Voltage Workshop Award will be presented. The meeting site is on the oceanfront (Route A1A). The hotel is several miles south of the pier and Daytona Beach "boardwalk". Two hotel-coordinated companion tours will be offered: a day trip to historical St. Augustine and a morning trip to the Ponce Inlet Lighthouse Museum. A free technical tour is scheduled for the Embry-Riddle Aeronautical University. On Friday, October 23rd, following the Workshop, a special technical tour of Kennedy Space Center has been arranged. The cost for the Space Center tour is not included in the registration fee. Both technical tours will be open to attendees and guests. Further information will be included in the registration information packet.

REGISTRATION AND ACCOMMODATIONS

Requests for registration information should be addressed, faxed or e-mailed to the Workshop Administrator, Ms. Janice Brooks, at the address given below. Advanced registration is strongly encouraged, with reduced fees for bonafide students and IEEE Life Members. Janice Brooks Phone: (703) 413-3882, Palisades Institute for Research Services, Inc. FAX: (703) 413-1315, 1745 Jefferson Davis Highway, Suite 500 Arlington, VA 22202 e-mail: jbrooks@washington.palisades.org

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Volume XXXII, Number 4

THE ORLANDO SECTION MONTHLY

A Monthly Publication of the IEEE Orlando Section

November 1998

Engineers and Educators Collaborate to Reach Solutions for Technological Literacy Enhancements

One hundred engineers and educators gathered on October 9-10, 1998, at the Harbor Court Hotel, in Baltimore, MD to collaborate and reach solutions for the enhancements of technological literacy for primary- and secondary-level students worldwide. The educators and engineers were part of the Technological Literacy Counts! (TLC) workshop sponsored by the IEEE (The Institute of Electrical and Electronics Engineers, Inc.).

The delegates represented a cross section of math, science, and technology teachers; school administrators; curriculum developers; practicing engineers and other engineering professionals; technological literacy advocates; and community leaders from the United States and other countries. During the workshop sessions, the delegates focused on the following technological literacy issues:

· definition of technological literacy
· the processes involved in technological learning · the effects of technological changes on the society · the initiatives necessary to promote technological literacy

"When we began organizing this workshop, we knew that we wouldn't be able to solve the issue of technological literacy in one sitting," says Arthur Winston, Ph.D., Vice President of IEEE Educational Activities. "Our goal in bringing these individuals together, was to put the issue on the table, let them discuss it, present their suggestions and solutions, so a global TLC network can be established."

The objective of this workshop was to open communication lines between engineers and teachers for a high-quality primary and secondary math, science, and technology education. "We hope that these 100 people will go back to their communities and convey the message about the importance of technological literacy for the future of our society," adds Dr. Winston.

The TLC workshop is designed to serve as a forerunner for future events related to the issue of technological literacy. For more information on how to become involved in promoting technological literacy among pre-college students, please contact Barbara Coburn, IEEE Educational Activities, 445 Hoes Lane, Piscataway, NJ 08854; Phone: 732.562.5498; Fax: 732.981.1686; E-mail: b.coburn@ieee.org.

This workshop was supported by Baltimore Gas and Electric Company; Ford Motor Company; S.U.N.Y. Binghamton; University of Texas at Austin; IEEE Educational Activities Board; IEEE Regional Activities Board; IEEE United States Activities; IEEE Foundation; and the following IEEE Societies: Communications Society; Education Society; Electromagnetic Compatibility Society; Electron Devices Society; Engineering in Medicine and Biology Society; Power Electronics Society; Power Engineering Society; Systems, Man and Cybernetics Society; Ultrasonics, Ferroelectrics Society; and Vehicular Technology Society.

The IEEE is the world's largest technical professional society, serving the interests of more than 320,000 members in the information and electrotechnology communities in approximately 150 countries. In keeping with its "Networking the World" slogan, the IEEE helps to foster technological innovation, enable members' careers and promote community worldwide.

Arthur Winston is the IEEE Vice President for Educational Activities, as well as a Fellow of the IEEE. He completed his undergraduate work at the University of Toronto, Toronto, Canada and received his Ph.D. from MIT, Cambridge, Massachusetts. He is the Senior Associate Director of the Gordon Institute of the Graduate School of Arts and Sciences, Tufts University, Boston, MA. He is a Research Professor, Electrical Engineering and Computer Science at Tufts. Dr. Winston received the IEEE Educational Activities Board Major Educational Innovation Award based on his work in developing and establishing the Gordon Institute program.

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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Hello, Orlando! Well, the annual IEEE Wet'n Wild Splash Bash was a great success!

We had 119 adults and 60 children in attendance. The weather was great and the barbecued chicken was really good!. It was a great chance to enjoy family and friends and to spend some time with our colleges in a (very) relaxed atmosphere.

The question is, if we can get this many people to show up for the Splash Bash, why can't we get a couple of dozen to show up for the average chapter meeting? Perhaps the subject matter of the average chapter meeting is too academic, or is simply not relevant. Perhaps meetings are held at inconvenient times or places. What would encourage you to attend? Should we choose a more central location or a different time? Do you have a suggestion for a topic? Would you prefer technical tutorials, career development, or business related topics? Let us know. Email me at aberg@gdi.net or contact your chapter chair.

Finally, good news for members of the Systems, Robotics and Controls chapter. As you know, SRC has not been very active lately. Now, **Dr. Michael Haralambous** and **Dr. Zhihua Qu** have taken over as chair and vice-chair respectively and are working to revitalize the chapter. I encourage all SRC members to give them your support.

DO YOU NEED IDEAS?

The IEEE Educational Activities Department has videos available that may help you create programs for section and chapter meetings, conference workshops and other events. The first two videos of the IEEE Entrepreneurial Skills Seminar six-volume series can be viewed at no charge on the Web at http://emp.fit.edu/ess with commonly available browsers and a downloadable plug-in. The videos address such "value-added" skills as communications, report writing, marketing and understanding business finance. Using the Web to deliver the videos is a new way for the IEEE to provide educational and practical material on technology transfer and entrepreneurship, and reach our global audience. The videos can be viewed individually, in combination or as a total seminar.

REMINDER...

With the astronomical increase in phone numbers and phone lines needed due to the proliferation of cell phones, faxes, modems, etc., we find that the phone companies are adding more and more new area codes. Please don't forget to include IEEE when you notify all the important people in your life that your phone number is changing! Any change in contact information may be e-mailed to address-change@ieee.org.

Senior Member Update

Following is the name of the newly elected Orlando Senior Member from the October 1998 Admission and Advancement Committee meeting held in Pittsburgh, PA.

Dr. Al Berg

Congratulations!!!

POLL SHOWS ENGINEERING REMAINS U.S. 'STEALTH PROFESSION'

by Chris Currie, IEEE-USA staff

Amid concerns that not enough of America's brightest students are pursuing technical careers, a new Harris Poll survey shows that the U.S. public feels uninformed about the engineering enterprise and betrays a startling lack of knowledge about engineers' involvement in key areas of American endeavor.

Louis Harris and Associates conducted the telephone survey in late July. The American Association of Engineering Societies (AAES) commissioned the study, with additional funding provided by The Institute of Electrical and Electronics Engineers - USA (IEEE-USA) and other societies. An objective of the study is to determine the impact of public awareness of engineering upon the size and quality of the U.S. engineering workforce, particularly given the changing demographics of the overall domestic workforce.

Although the survey of "American Perspectives on Engineers and Engineering" found that Americans believe that engineers are to be credited with creating economic growth and preserving national security, the general public is less clear on how and why that is so. The survey revealed that 45 percent of Americans believe that they are "not very well informed about engineering and engineers" while another 16 percent stated that they are "not at all well informed about engineering and engineers."

Among women, however, the percentages increased to 55 percent and 23 percent, respectively. Even a majority of college graduates (53 percent) reported that they are "not very well informed or not at all well informed" about engineering and engineers.

The responses to other questions demonstrated that the respondents were not guilty of false modesty. On one question that asked which professionals -- scientists, technicians, or engineers -- respondents "mostly associated" with various technical activities, engineers were frequently underestimated in their roles. In areas where there exists a strong or dominant engineering element such as "working in space," "developing new forms of energy" and "creating new materials," scientists were cited more than engineers.

"The poll manifests both a subjective and objective American ignorance about the work of engineers," said IEEE-USA President John R. Reinert. "Observers have often pointed to engineers' allegedly 'nerdy' image as a turn-off to students considering engineering careers. However, these results may have identified the stealth character of our profession as the real challenge in attracting the nation's best and brightest young people -- including women and minorities -- to technical fields."

A more encouraging result for engineers is that ignorance apparently doesn't translate into bad feelings toward the profession. Many parents suggested they would encourage their children to pursue careers in engineering. When asked the question, "Using a scale of 1 to 10 with 1 being extremely displeased to 10 being extremely pleased, if your son or daughter or other family member said they wanted to be an engineer, how pleased would you be?" the mean response was 9.

Furthermore, an earlier Harris Poll conducted in June revealed that engineers hold relatively high prestige compared to other professions -- although they fall considerably below scientists, teachers and physicians. And a Gallup poll last November found that engineers ranked seventh among surveyed professions in honesty and ethics.

Americans may be laying the blame for their own lack of engineering awareness at the feet of the news media. When asked to rate the quality of media coverage of science, technology, engineering, and medical discoveries, more than 69 percent of the survey respondents assigned "fair" or "poor" grades to engineering reporting while less than 3 percent gave the media an "excellent" score. Among college graduates and those with incomes of $75,000 or more, 85 percent and 80 percent of the respondents respectively assigned scores of "fair" and "poor" to the media's job in covering engineering.

"Other professionals -- such as doctors, lawyers and teachers -- can inform the public more easily because they work directly with the public," said Reinert. "We speak mostly through our products, and even those are increasingly difficult to understand. So it's imperative that we do a better job of speaking directly to the public through the media and our professional societies in order to bridge the awareness gap. The health of the engineering workforce and, ultimately, the American quality of life may be at stake."

In addition to IEEE-USA, survey cosponsors included The American Institute of Mining, Metallurgical, and petroleum Engineers (AIME), the American Society of Civil Engineers (ASCE), the American Society of Mechanical Engineers (ASME), SPIE ^ the International Society for Optical Engineering, and the United Engineering Foundation.

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Nov	**03**	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
Nov	**07-13**		Computer - **Supercomputing '98** - Orange County Convention Center, Orlando
Nov	**10**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Dec	**01**	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
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3/4 Page	8 x 7.5	$255	$225
2/3 Page	8 x 7 or 5 x 10.5	$225	$195
Half Page	8 x 5	$195	$165
1/3 Page	8 x 2.75 or 2.25 x 8	$165	$135
1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
1/6 Page	4 x 3 or 2.25 x 5	$80	$72
Business Card	3.5 x 2.25	$50	$35
Two Page Preprinted Insert	16.95 x 10.95	$292	$252
Full Page Preprinted Insert	8.45 x 10.95	$195	$165

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ORLANDO SECTION MEMBERS! USE THE IEEE PROFESSIONAL ASSISTANT NETWORK

We offer unemployed Orlando Section members and local IEEE oriented firms an opportunity to run a **FREE business card** position wanted and position available ads, respectively, in the Orlando Section Monthly. Write your own ad copy and mail or fax it to the Orlando Section Monthly editorial office. Please include your membership number. Your ad will appear in the next available issue.

Volume XXXII, Number 5

THE ORLANDO SECTION MONTHLY

A Monthly Publication of the IEEE Orlando Section

December 1998

Our warmest wishes for this holiday season and throughout the new year!

The IEEE Orlando Section Executive Board

Meeting Announcement

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

Introduction to Asynchronous Transfer Mode Networking

Sponsor: COM/SP
Speaker: Dr. Al Berg, RSI Baseband Technologies
Topic: ATM is a networking technology that simultaneously transports voice, data and video with guaranteed quality of service. While ATM has not been widely deployed in the LAN environment, it has been adopted by most voice and data carriers and currently transports nearly half of all Internet traffic in the network core. ATM is now emerging as the technology of choice for most residential broadband access networks and is expected to bring integrated voice, high speed data and digital video to the home. This talk will provide a brief introduction to ATM technology and its applications.
Date: Wednesday, December 2
Time: 6:00 PM to 7:30 PM. Refreshments will be served.
Location: RSI Baseband Technologies. 6901 TPC Blvd., Suite 650, Orlando
Contact: Please call 888-0050 ext. 24 or send Email to al.berg@rsicom.com for directions.

IEEE Orlando Section Annual Banquet February 20, 1999

Please see the January issue for details

STAR SEARCH

ORLANDO SECTION AWARDS

Purpose - To encourage and facilitate the identification of potential candidates for Orlando Section Awards by providing a simple avenue for preliminary consideration by the Awards Committee.

Procedure - The submitter fills out the form on page 3 and suggests nominations and endorsers to support the nomination. After a review process, some candidates will be selected for nomination. If the submitter is willing to prepare the nominations forms, the Committee will provide the necessary materials by return mail. If not, the Committee will attempt to locate a suitable nominator. The members of the Awards Committee are not permitted to nominate or endorse any candidates.

Qualifications - The **Outstanding Engineer Award** is designed to recognize a member of the Section who, through his/her technical and professional abilities, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Engineering Educator Award** is designed to recognize a member of the Section who has shared his/her technical and professional abilities through teaching (in industry, government or in an institution of higher learning) and in so doing has made an outstanding contribution to the electro-technology profession.

The **Outstanding Service Award** is designed to recognize a member of the Section who, through his/her service to the Region and to the Institute, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Entrepreneur Award** is designed to recognize a self-employed member of the Section who, through his/her consulting abilities has made outstanding contributions to the electro-technology profession.

Eligibility- 1) Only IEEE members with 3 years residency in the Orlando Section are eligible. **2)** A nominee cannot be considered for more than one award simultaneously. **3)** Current members of the Section Executive Board are not eligible. **4)** Previous award recipients, even from other Sections, are not eligible for the same award. **5)** The candidate need not be a member of a Group or Society.

Candidate Search Form - *See page 3*

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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Greetings Orlando! Wow, 1998 has gone by fast. Less than 400 days until Y2K. Assuming this newsletter arrives in time, please let me wish you and your loved ones a very happy Thanksgiving. Despite the many difficulties we face as a nation and in our daily lives, we are truly blessed and have very much to be thankful for!

A bit of news - in addition to the overall IEEE student chapter chaired by **Michelle Proctor**, a new IEEE Computer Society student chapter is being formed. The new student chapter will be chaired by **Chris McKenna** and **Dr. Brian Petrasko** will be their faculty advisor. Chris is seeking the support of local industry to provide speakers for their chapter meetings and to arrange tours. Please support all of our student chapters. These are the future leaders of our profession.

ON-LINE DISCUSSION OF ELECTRONIC SERVICES

The IEEE Electronic Services Steering Committee (ESSC) invites you to participate in a collaborative on-line discussion of electronic services.

The ESSC was established to take a fresh look at IEEE's future offerings in electronic services, particularly those offered over the Web from an Institute wide perspective. The intent is to develop an Institute plan that maps what customers (members, companies, libraries, etc.) want from IEEE 2 to 5 years in the future into a coherent strategy that addresses policies, processes, and computing/communications/information infrastructure requirements needed to implement the services.

The URL for the ESSC is http://www.ieee.org/committee/essc/.

IEEE's Readiness to Support Ethics in the 21st Century

Walter L. Elden, P.E.,
NIEE Board of Governors

In the October 1998 issue of IEEE's The Institute monthly publication, an article of mine appears in its Ethics Column. The questions I raise are intended to invoke member opinions to the issue of IEEE's Readiness to Support Ethics in the 21st Century.

I invite you to consider the questions I have posed and submit your views. Through a consolidation of such views, it will be possible to formulate a set of recommendations to present to the IEEE Board of Directors, which, if adopted, will influence the direction IEEE takes in this area in the next millennium, affecting those who follow us.

You are asked to forward your responses to me at:

w.elden@ieee.org

The article may be found on the internet at this WEB address:

http://www.institute.ieee.org/INST/oct98ethics.html

ELECTION RESULT

Merrill W. Buckley, Jr., has become the second IEEE-USA President directly elected by the IEEE's U.S. members. Results of the 1998 IEEE election reveal Buckley garnered the backing of 19,179 members for the post of IEEE-USA President-Elect for 1999, beating out candidates Michael R. Andrews and Charles S. Lessard, who received 14,069 and 8,563 votes, respectively. Voters also elected as 1999-2000 IEEE-USA Member-at-Large Michael C. Mulder (20,336 votes) who had a close victory over Robert P. Noberini (18,872 votes).

For the post of 1999 IEEE President-Elect, Bruce A. Einsenstein won with 21,262 ballots cast for him. The other candidates, Joel B. Snyder and Raymond D. Finlay, received 19,399 and 17,145 votes, respectively. In all, of the 237,556 ballots mailed to IEEE members, 51,483 were returned for a voter turnout of 21.67 percent, an increase over the 1997 participation rate of 17.36 percent.

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

1. AWARD:
____ Outstanding Engineer Award
____ Outstanding Engineer Educator Award
____ Outstanding Service Award
____ Outstanding Entrepreneur Award

Please Return Form by 1/15/99
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UCF Dept. of ECE
Orlando, FL 32816-0001

2. NOMINEE: _____

Professional Affiliation and Title: _____

Current Address: _____

Work Phone: ( ) _____ **Home Phone: ( )** _____

3. PROPOSED CITATION (30 words or less) FOR: _____

_____

_____

4. IEEE SOCIETY/BOARD RELEVANT TO ACHIEVEMENT CITED: _____

5. SUBMITTED BY: _____

IEEE Position and Grade: _____

Current Address: _____

Work Phone: ( ) _____ **Home Phone: ( )** _____

6. ARE YOU WILLING TO PREPARE THE NOMINATION FORMS YOURSELF? YES NO

7. POTENTIAL ENDORSERS (two required who are familiar with nominee, who can attest to his/her contributions and to the importance thereof):

A. Name: Position/Title: Address: City/ZIP Phone:	A. Name: Position/Title: Address: City/ZIP Phone:	A. Name: Position/Title: Address: City/ZIP Phone:

8. BRIEF EVIDENCE TO SUPPORT NOMINATION/YEAR ACHIEVEMENT/IMPORTANCE: _____

_____

_____

9. SUGGESTED NOMINATOR(S) IF DIFFERENT FROM #5.: _____

_____

Submittal of this form does not replace the necessity of a completed nomination form. See page 1 for candidate qualifications.

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Volume XXXII, Number 6

THE ORLANDO SECTION MONTHLY

IEEE

A Monthly Publication of the IEEE Orlando Section

January 1999

IEEE Annual Banquet

A Tribute to Central Florida's Engineering Excellence

Saturday, February 20, 1999

4th Fighter Group Restaurant
E. Colonial Dr. & Rickenbacker Rd.
Orlando

6:00 PM Cash Bar
7:00 PM Dinner and Awards

Choice of Entrees:
Steak
Fish
Chicken

Music

IEEE Members: $20.00
IEEE Fellows: Free
IEEE Fellows' Spouses: $20.00

RSVP: Dr. Takis Kasparis
(407) 823-5913
Email: tnk@ece.engr.ucf.edu

Meeting Announcement

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here. Members are encouraged to invite and bring guests to these events.

Marketing Yourself as a Consultant

Sponsor: Consultants' Network

Speaker: Mr. Mark Roch, Roch Technical Services, an Orlando based Computer and Technology Consultancy that provides Computer and Technology Planning, Implementation and Management services to executives. Mark has over 20 years of business and technical experience in the Information Technology industry and has held positions as a Software Engineer, Sales Representative, Product Marketing Manager, and Technical Consultant. Mark may be contacted at Email: ieee@roch-tech.com, Website: www.roch-tech.com or Telephone: (407) 465-0880.

Topic: Are you an aspiring, part-time or full-time consultant who would like to gain some new ideas on how to effectively market your services? Do you wonder how the Internet could help your efforts? What marketing resources are available for consultants? What are other consultants doing that works? Join us to explore these and other related topics in a presentation and discussion forum. Come as you are. All are welcome!

Date: Tuesday, January 12, 1999

Time: 6:00 PM to 7:30 PM. Refreshments will be served.

Location: Orlando Public Library, Third Floor, 101 East Central Boulevard, Orlando (407) 425-4694. See www.roch-tech.com/ieee for map.

Reservations: Jorge Medina (407) 260-1676, ext. 002, Email: j.medina@ieee.org.

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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Happy New Year Orlando! I hope that you and your loved ones had a joyous holiday season. We are going to gradually change our section meeting format for 1999. As you know, the monthly section meetings have traditionally been business meetings. Technical and professional development meetings have been held by the chapters. This has resulted in a lot of boring and poorly attended section meetings. To rectify this situation, we are planning to add technical and professional development content of broad general interest to the section meetings and will hold any lengthy business discussions until after the speaker. Chapter meetings will continue (or not ;-) as usual. Some topics being considered are Intellectual Property Rights, Year 2000 Remediation and Wireless Communications. We will also be inviting chapter chairs to give a short briefing on the hot topics in their disciplines. Hope to see you there!

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ORLANDO SECTION AWARDS

Purpose - To encourage and facilitate the identification of potential candidates for Orlando Section Awards by providing a simple avenue for preliminary consideration by the Awards Committee.

Procedure - The submitter fills out the form on page 3 and suggests nominations and endorsers to support the nomination. After a review process, some candidates will be selected for nomination. If the submitter is willing to prepare the nominations forms, the Committee will provide the necessary materials by return mail. If not, the Committee will attempt to locate a suitable nominator. The members of the Awards Committee are not permitted to nominate or endorse any candidates.

Qualifications - The **Outstanding Engineer Award** is designed to recognize a member of the Section who, through his/her technical and professional abilities, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Engineering Educator Award** is designed to recognize a member of the Section who has shared his/her technical and professional abilities through teaching (in industry, government or in an institution of higher learning) and in so doing has made an outstanding contribution to the electro-technology profession.

The **Outstanding Service Award** is designed to recognize a member of the Section who, through his/her service to the Region and to the Institute, has made an outstanding contribution to the electro-technology profession.

The **Outstanding Entrepreneur Award** is designed to recognize a self-employed member of the Section who, through his/her consulting abilities has made outstanding contributions to the electro-technology profession.

Eligibility- 1) Only IEEE members with 3 years residency in the Orlando Section are eligible. **2)** A nominee cannot be considered for more than one award simultaneously. **3)** Current members of the Section Executive Board are not eligible. **4)** Previous award recipients, even from other Sections, are not eligible for the same award. **5)** The candidate need not be a member of a Group or Society.

Candidate Search Form - *See page 3*

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

ORLANDO SECTION AWARD CANDIDATE SEARCH FORM

1. AWARD:
____ Outstanding Engineer Award
____ Outstanding Engineer Educator Award
____ Outstanding Service Award
____ Outstanding Entrepreneur Award

Please Return Form by 1/15/99
To: Dr. Takis Kasparis
UCF Dept. of ECE
Orlando, FL 32816-0001

2. NOMINEE: _____

Professional Affiliation and Title: _____

Current Address: _____

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3. PROPOSED CITATION (30 words or less) FOR: _____

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4. IEEE SOCIETY/BOARD RELEVANT TO ACHIEVEMENT CITED: _____

5. SUBMITTED BY: _____

IEEE Position and Grade: _____

Current Address: _____

Work Phone: ( ) _____ **Home Phone: ( )** _____

6. ARE YOU WILLING TO PREPARE THE NOMINATION FORMS YOURSELF? YES NO

7. POTENTIAL ENDORSERS (two required who are familiar with nominee, who can attest to his/her contributions and to the importance thereof):

A. Name:	A. Name:	A. Name:
Position/Title:	Position/Title:	Position/Title:
Address:	Address:	Address:
City/ZIP	City/ZIP	City/ZIP
Phone:	Phone:	Phone:

8. BRIEF EVIDENCE TO SUPPORT NOMINATION/YEAR ACHIEVEMENT/IMPORTANCE: _____

_____

_____

9. SUGGESTED NOMINATOR(S) IF DIFFERENT FROM #5.: _____

_____

Submittal of this form does not replace the necessity of a completed nomination form. See page 1 for candidate qualifications.

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Jan	**12**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Feb	**02**	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
Feb	**09**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Feb	**20**	6:00 PM	Orlando Section - **Annual Banquet** - 4th Fighter Group Restaurant, Dr. T Kasparis, 407-823-5913, tnk@ece.engr.ucf.edu
Mar	**02**	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
Mar	**09**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Apr	**06**	6:00 PM	Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
Apr	**13**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org

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Volume XXXII, Number 7

THE ORLANDO SECTION MONTHLY

IEEE

A Monthly Publication of the IEEE Orlando Section

February 1999

The Orlando Section of the Institute of Electrical and Electronics Engineers Announces the

1999 Annual Banquet

A Tribute to Central Florida's Engineering Excellence

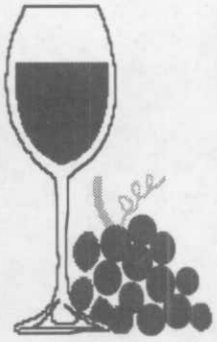
Saturday, February 20, 1999

4th Fighter Group Restaurant

E. Colonial Dr. & Rickenbacker Rd. Orlando

6:00 PM Cash Bar
7:00 PM Dinner and Awards

Choice of Entrees:
Steak
Fish
Chicken



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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Greetings Orlando! I hope this letter finds you and yours doing well in the new year. I want to personally invite you to the IEEE Annual Banquet being held on Saturday the 20th of this month. It is being held at the 4th Fighter Group restaurant near the executive airport and will feature the music and atmosphere of the great Swing era. It should be a great time to get together with old friends, met some new ones and to allow us to honor the contributions of outstanding IEEE members in the Central Florida area. Don't miss it!.

We are also looking for speakers to provide short talks of general interest to the engineering community at the monthly section meetings. New technologies, business and legal issues relating to engineering and other professional topics are all applicable. If you would like to speak or
would like to recommend a speaker, please give me a call or send me an Email.

See you at the 4th Fighter Group!

WEB RENEWAL EXPANSION

Based on the success of the Web renewal pilot project in Regions 3 and 8 (14,000 registrations for Web renewals to date!), the service has been expanded to include all members as of 1 December. Special letters announcing the expanded service have been mailed. The letters include individual registration information and PIN numbers needed to use the Web renewal.

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Members are encouraged to invite and bring guests to these events.

Orlando Section and Consultants' Network Joint Meeting

Intellectual Properties for Dummies in Y2K-1

Sponsors: Orlando Section/Consultants' Network

Speaker: Mr. Edward G. Tutle, Pres./Consultant - Tutle International Technology Marketing (Orlando, FL)@ <tutleone@gdi.net>; Consulting in technology evaluations and licensing for small and large entities dealing primarily in new products for US and world markets. He is a Life Sr. Member of the IEEE and Sr. Member of the AIAA, Member of the American Society of Agricultural Engineers, and of the Licensing Executives Society (USA-Canada).

Topic: "Intellectual Property (IP) for Dummies (and others) in Y2K-1" is intended for all who deal in or develop IP, about the vital changes which will effect everyone in some way, and before the Millennium. A short review of IP items like patents, copyrights, trade (and service) marks, trade secrets, confidentiality agreements, patent scams, and IP theft through the ages. We all will learn from a Q&A session open to all.

Date: Tuesday, February 9 , 1999

Time: 6:00 PM to 6:15 PM. Refreshments
6:15 PM to 7:15 PM. IP Lecture
7:15 PM to 8:30 PM. EXCOM Meeting

Location: Orlando Public Library, Third Floor, 101 East Central Boulevard, Orlando (407) 425-4694.

Reservations: Jorge Medina (407) 260-1676, ext. 002, Email: j.medina@ieee.org.

IEEE: Networking the World
www.ieee.org

Research Seminar

Nonlinear Learning Control and Its Applications

Zhihua Qu, CAE/LINK Professor
College of Engineering
University of Central Florida

Extended Abstract

In many applications such as manufacturing, space robotics and automation, one of important issues is to design control systems that achieve trajectory tracking with acceptable accuracy. Often, tracking error systems are nonlinear and contain unknown parameters or time functions. If the desired trajectory is periodic or repetitive, iterative learning control can be used to improve system performance. The intuition behind this approach is periodicity of the repeated tasks, although other functions with a given and known characteristic may be learned. From trial to trial, all periodic time functions remain to be constant at any fixed instant of local time. So, a learning control if properly designed should be able to learn constants since constants are simplest form of unknowns. Through learning unknown parameters or time functions, learning control can compensate linear as well as nonlinear dynamics so that tracking performance can be enhanced.

Learning control is closely related to other advanced controls such as adaptive control, robust control, fuzzy control, neural control, etc. In this talk, we shall examine the relationship among various model-based control methodologies for nonlinear systems and answer two important questions: What types of functions can be learned, and what control laws should be designed to learn them. The time functions are classified into several classes according to their properties such as continuity, periodicity, and persistency (as whether they are vanishing at the origin). As will be shown, advanced controls can all be designed by the Lyapunov's direct method and that they will be described by differential equations or difference equations or both. Typical systems are employed to illustrate the main ideas. Conditions are found for the learning controls to achieve asymptotic stability and asymptotic learning convergence. Case studies in applications will be presented.

Sponsors: College of Engineering, UCF and the IEEE Society of Systems/Robotics/Controls
Date: Wednesday, February 24, 1999
Time: 5:30 - 6:30 PM
Location: UCF Engineering Building, Room 288
Refreshments will be served
For questions, contact Dr. Qu at
(407) 823-5976 or
uq@pegasus.cc.ucf.edu

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Feb 09 6:00 PM EXCOM/Consultants' Network - **Intellectual Property for Dummies in Y2K-1** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Feb 20 6:00 PM Orlando Section - **Annual Banquet** - 4th Fighter Group Restaurant, Dr. T Kasparis, 407-823-5913, tnk@ece.engr.ucf.edu
Feb 24 6:00 PM SRC - **Nonlinear Learning Control and Its Applications** - UCF, ENG 288, Dr. Qu 407-823-5976, qu@pegasus.cc.ucf.edu

Mar 02 6:00 PM Orlando Section - **EXCOM** - UCF, Eng. Bldg. Room 288, Dr. A. Berg 407-365-2214, aberg@gdi.net
Mar 02 6:00 PM PE/AIS/PE - **Building & Commercial Automation** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com
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Mar 09 6:00 PM PE/AIS/PE - **Distribution Automation** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com
Mar 16 6:00 PM PE/AIS/PE - **Substation Automation** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com
Mar 23 6:00 PM PE/AIS/PE - **SCADA/EMS (Energy Management System)** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com

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1/3 Page	8 x 2.75 or 2.25 x 8	$165	$135
1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
1/6 Page	4 x 3 or 2.25 x 5	$80	$72
Business Card	3.5 x 2.25	$50	$35
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THE ORLANDO SECTION MONTHLY

A Monthly Publication of the IEEE Orlando Section

March 1999

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Your Name in Print: How to be a Published Author

A.k.a. Publish or Perish

Sponsors: Orlando Section/AES Chapter

Speaker: Dr. Gerald C. Holst, JCD Publishing. Dr. Holst is an author, lecturer, and consultant on imaging systems. He has written four books and started JCD Publishing. He is a fellow of SPIE, and a member of IEEE and OSA.

Topic: There are three reasons to publish. Ego: want to tell a story or write a better textbook. Credibility: increase peer recognition (a.k.a publish or perish). Make money: be the next Danielle Steele or have a textbook widely accepted.

Your literary work could appear in a newspaper, trade journal, technical/professional journal, or a book. The advantages and the disadvantages of each approach are discussed. The difficulty of writing an engineering article is compared to the relative difficulty of writing a novel. Rejection of a manuscript does not mean your work has no merit. It usually means that the publisher was not interested in your topic at that particular moment. Self-publishing can be fun but you must be a self-starter. It is relatively inexpensive. But you must decide how to distribute a garage full of books.

Date: Tuesday,March 16, 1999

Time: 6:00 PM - 6:15 PM, refreshments; 6:15 PM - 7:15 PM Presentation; 7:15 PM - 8:30 PM EXCOM meeting.

Location: Orlando Public Library, Third Floor, 101 East Central Boulevard, Orlando (407) 425-4694.

Contact: Dr. Gerald Holst, 407-629-5370, E-mail: JCDGCH@aol.com

1998 Consultants' Fee Survey Results

Sponsors: Consultants' Network and PACE

Program: This meeting will be a presentation of the summary of the 1998 consultants' survey on fees charged by our members. The Orlando Consultants' Network asked all its Region 3 members who have served clients during the 1998 period to respond to a questionnaire on consultants' fees. Our goal is to establish a realistic appraisal of the prevailing rate structure in our areas of expertise and should be beneficial to both ourselves and our clients.

Date: Tuesday, March 9, 1999

Time: 6:00 PM - 7:30 PM

Location: Orlando Public Library, Third Floor, 101 East Central Boulevard, Orlando (407) 425-4694.

RSVP: Jorge Medina 407-260-1676, ext. 002, E-mail: j.medina@ieee.org

Y2K COUNTDOWN

The last day of December 1999 and the first day of January 2000 are probably the most important dates in the Y2K computer problem equation, but are you aware of the other dates that require attention in the Y2K test lab as well? They are:

-3 January: The first business day of 2000.

-28 and 29 February and 1 March: The days surrounding the leap-year date.

-31 October: The first two-digit day and month of 2000.

-1 January 2001: The first day of the 21st century (the true first day of the third millennium).

The first critical day before all of these is 9 September 1999 (9-9-99). In the early days of computer programming, a sequence of 9s was often used to signal the end line of a program. It is possible that some computer systems may recognize this number as an "end" code rather than a date, and end the program.

Like most Y2K problems, the extent of this date problem is unknown. As a result, the IEEE is doing extensive testing before 9 September. There are less than 350 days remaining to 2000. Are you ready? Be Prepared...Be Compliant.

Power Systems Automation Seminar Program

March 2, 9, 16 & 23

See page 3 for details

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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Greetings Orlando! We had our first new format Executive Committee meeting on February 9th. The meeting was held in conjunction with the Consultants' Network at the Orlando Public Library and featured Mr. Edward Tutle, who gave a very informative talk on the protection of intellectual property. The meeting was well attended, so based on a sample size of one, the new format appears to be a success. We have interesting topics lined up for the next few months, but we are still looking for speakers to round out the rest of the year. If you are interested in giving a talk, please let me know. New technologies, business and legal issues relating to engineering and other professional topics are all applicable. Even product demonstrations may be suitable, if the talk provides sufficient technical depth. See you at the next EXCOM!

SPEAKERS ON TECHNICAL ENTREPRENEURSHIP SOUGHT FOR IEEE-USA S-PAC SPEAKERS BUREAU

The IEEE-USA Student Professional Awareness Committee is Recruiting speakers to join the national Student Professional Awareness Conference (S-PAC) speaker list. (S-PACs are student-planned and executed conferences on nontechnical, career-related subjects not usually covered in the standard engineering curriculum.) We are specifically looking for speakers who can talk about the pro's, cons, and how-to's of starting a business or becoming a consultant. The committee reimburses the travel expenses of S-PAC speakers. If you are interested in sharing your wisdom and experience on either of these topics with engineering students, contact Ann Hartfiel at the IEEE-USA Office (a.hartfiel@ieee.org or 202-785-0017).

IEEE TEAMS UP WITH A UNIVERSITY FOR A PILOT PROGRAM TO OFFER A WEB-DELIVERED COURSE

The IEEE has created an alliance with the Department of Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign (UIUC), Urbana, IL, to offer a web-delivered course on antennas and propagation.

This four-week course, designed to serve as a refresher for practicing engineers, will be based entirely on the Internet. Classes run from 1 April, 1999 through 30 April. Registration ends 31 March, 1999. Course capacity is limited to 30 students.

The course will provide learners with an analytical and intuitive understanding of antenna physics, expose them to antenna computer-aided design software, and introduce them to a variety of antenna structures of practical interest. The course will also cover recent developments in the wireless and personal communication systems. Those intending to register are expected to have a basic knowledge of electromagnetic wave theory outlining the general plane wave solution of Maxwell's equations, phenomena involving reflection and transmission of plane waves, transmission lines, and impedance matching techniques. Students who successfully complete the course will be awarded 3.6 IEEE Continuing Education Units (CEUs).

Eric Michielssen, Ph.D. will be instructing the course. Dr. Michielssen received his Ph.D. from the University of Illinois at Urbana-Champaign in 1992. He is an assistant professor in the UIUC Department of Electrical and Computer Engineering, associate director for the Center of Computational Electromagnetics, and a part-time faculty member in the Beckman Institute Photonic Systems Group. His professional interests are computational electromagnetics, photonic systems, high-speed digital circuits, fast algorithms, and stochastic optimization.

For more information about the course contents and requirements, and to register for the course, go to:
http://www.ieee.org/organizations/eab/distance.htm

IEEE: Networking the World
www.ieee.org

Power Systems Automation Seminar Program

During the month of March, the Orlando Chapter of the IEEE Power Engineering/ Industry Applications/Power Electronics Society will be hosting a seminar series on Power Systems Automation. The seminars will take place at the Pershing Street Training Facility of the Orlando Utilities Commission. The seminars will be held from 6:00 to 9:00 on Tuesday evenings beginning March 2, 1999 and ending on March 23, 1999. One Continuing Education Unit (CEU) will be awarded by the IEEE for those who attend the full seminar program. The seminar registration fee for IEEE members is as follows: $95 for Non-Students members and $15 for Student members. For non-IEEE members, the registration fee will be as follows: $145 for nonstudent, nonmembers and $40 for student nonmembers. The deadline for registering by mail is February 24, 1999. In class registration will permitted if space is available. For further information, contact the program coordinators: Robert Ashley (Westinghouse) @ 281-3418, FAX: 281-5007, Email: robert.ashley.swpc.siemens.com or Debi Prince (Florida Power Corp.) @475-2275, FAX: 475-2411, EMAIL: debra.prince@fpc.com

The schedule for the seminar series is listed below:

Date	Topic	Instructor
March 2, 1999	Building and Commercial Automation	Mr. Kim Shinn, TLC Engineers
March 9, 1999	Distribution Automation	Mr. Rick Liposhak, Stellar Dynamics
March 16, 1999	Substation Automation	Mr. John McDonald, KEMA Consulting
March 23, 1999	SCADA /EMS (Energy Management System)	TBA

Registration: Send check, payable to IEEE Power Engineering Society, Orlando Chapter, for appropriate above mentioned amount to:

Debi Prince
2600 Lake Lucien Drive, MT3B
Maitland, Florida 32751-7234

Name: _____

Address _____

Telephone (H) _____ **(W)** _____

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Mar 02 6:00 PM PE/AIS/PE - **Building & Commercial Automation** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com
Mar 09 6:00 PM Consultants' Network - **1998 Consultants' Fee Survey Results** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Mar 09 6:00 PM PE/AIS/PE - **Distribution Automation** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com
Mar 16 6:00 PM EXCOM/AES - **Your Name in Print:** ***How to be a Published Author*** - Orange County Library, G. Holst, 407-407-629-5370, jcdgch@aol.com
Mar 16 6:00 PM PE/AIS/PE - **Substation Automation** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com
Mar 23 6:00 PM PE/AIS/PE - **SCADA/EMS (Energy Management System)** - R. Ashley 407-281-3418, robert.ashley.swpc.siemens.com

Apr 06 6:00 PM Orlando Section - **EXCOM** - Location TBA, Dr. A. Berg 407-365-2214, aberg@gdi.net
Apr 13 6:00 PM Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org

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2/3 Page	8 x 7 or 5 x 10.5	$225	$195
Half Page	8 x 5	$195	$165
1/3 Page	8 x 2.75 or 2.25 x 8	$165	$135
1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
1/6 Page	4 x 3 or 2.25 x 5	$80	$72
Business Card	3.5 x 2.25	$50	$35
Two Page Preprinted Insert	16.95 x 10.95	$292	$252
Full Page Preprinted Insert	8.45 x 10.95	$195	$165

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Call for Speakers or Papers on Y2K Related Issues

We are looking to host a conference at UCF in late August or early September whose focus would be Y2K related issues (i.e., governmnet, business, utilities, telecommunications, etc). The conference would cater to UCF and the Central Florida area.

Presentations should be approximately 30 minutes in duration. Please contact: IEEE-Computer Society at

ieee-cs@pegasus.cc.ucf.edu

Volume XXXII, Number 9

THE ORLANDO SECTION MONTHLY

IEEE

A Monthly Publication of the IEEE Orlando Section

April 1999

IEEE ORLANDO SECTION 1999 AWARDS BANQUET

by Jorge Medina
Orlando Section Monthly Editor

The 1999 Orlando Section Awards Banquet was held at the 4th Fighter Group Restaurant, Orlando. Twenty members and guests attended the annual function. The following awards were presented during the function.

Student Awards

Each year the section awards to an outstanding undergraduate and graduate students from the Electrical and Computer Engineering Department. The Award Winners were:

Outstanding Undergraduate ECE Student
Mr. Colin Behr

Outstanding Graduate ECE Student
Mr. Dimitrios Charalampidis

Outstanding Graduate
Computer Science Student
Mr. Fen-Huei Simon Sheu

Outstanding Undergraduate and Graduate Student Award Recipients

Chapter Engineer-of-the-Year Award

Each of the Chapters in the Section select a member from within the Chapter as the Engineer-of- the-Year. The award is in recognition of outstanding contributions the members have made to their profession. The evaluation criteria include importance of technical contribution, technical papers and presentations, service to IEEE and the engineering profession. The following were the Chapter Engineer-of-the Year Award recepients for 1999:

Communications/
Signal Processing Chapter
Dr. A. J. Vigil

Consultants' Network
Mr. Mark Roch

Chapter-of-the-Year Award Recipients

Orlando Section Awards

The Orlando Section Outstanding Engineer Award of the year was presented to ***Mr. Nelson Barbeito*** who through his technical and professional abilities have made outstanding contributions to his profession.

Outstanding Engineer Award
Mr. Nelson Barbeito

The Orlando Section Outstanding Engineer Educator Award was presented to ***Dr. Parveen Wahid***, who through his academic contributions, has enhanced the engineering profession.

Outstanding Engineer Educator Award
Dr. Parveen Wahid

This year the Outstanding Service Awards go to ***Dr. Kalpathy B. Sundaram*** in recognition of their contributions and service to the local and region level.

Outstanding Service Award
Dr. Kalpathy B. Sundaram

Outstanding Orlando Section Award Recipients

Special thanks go to ***Dr. Gerald Holst,*** Section Secretary, who acted as Mater of Ceremonies and Awards Chairman, ***Dr. Takis Kasparis*** , Section Awards Chairman, who prepared the plaques and certificates , and ***Dr. Kalpathy B. Sundaram***, Ex-Section Chair and photographer, for making the evening a great success. Also, The Orlando Section would like to thank the Awards Committee for their help in selecting the 1999 Awards.

Consultants' Fee Survey Results
See page 3 for details

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Apr	**06**	6:00 PM	Orlando Section - **EXCOM** - UCF, ENG Bldg. Room 288 , Dr. A. Berg 407-365-2214, aberg@gdi.net
Apr	**13**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
May	**04**	6:00 PM	Orlando Section - **EXCOM** - Location TBA, Dr. A. Berg 407-365-2214, aberg@gdi.net
May	**11**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
May	**23-26**		ISCAS '99 - **CAS** - Renaissance Orlando Resort, Orlando, FL
Jun	**01**	6:00 PM	Orlando Section - **EXCOM** - Location TBA, Dr. A. Berg 407-365-2214, aberg@gdi.net
Jun	**08**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Jul	**11-16**		International Symposium & URSI Nat'l Radio Science Meeting - AP - Renaissance Orlando Resort, Orlando, FL

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1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
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May 1999

Invention in Everyday Life

Sponsors: Orlando Section/AES Chapter

Speaker: Dr. David E. Flinchbaugh, P.E., IEEE Fellow, Aerobeam Corp.

Topic: Inventions surround us in this modern age. They make our lives more enjoyable in many ways by providing conveniences not even imagined at the dawn of this century. Sometimes they make our lives more complex. Who is an inventor? What will the new millennium bring? Let's take a look at how inventions utilize the patent, trademark and copyright systems... How they can profit from their own ingenuity. Some inventors give birth to innovative products, become entrepreneurs, and build business for their families. We'll look at some interesting examples of high-tech and low-tech successes... and failures. Lasers, computers, robots, and medical aids are dear to my heart. Examples from last month's Inventor's Showcase at the Disney EPCOT Center will illustrate what other people are thinking about and the types of problems they are solving today. Being creative is fun! Our schools should motivate and nurture creative minds at an early age. We live longer and happier when we use our minds to foster new ideas. We should dispel the conjured traditional image of the "Rube Goldberg" inventor, because we really are all inventors whenever we think about or do something a little differently as we go through each day of our lives. Engineers with an open, active mind possess the ability to help shape an exciting future!

Date: Tuesday, May 4 , 1999

Time: 6:00 PM to 6:15 PM. Refreshments
6:15 PM to 7:15 PM. Lecture
7:15 PM to 8:30 PM. EXCOM Meeting

Location: UCF, Engineering Building, Room 288

Contact: Dr. D. Flinchbaugh, Phone: 407-859-4855, 407-209-5000 ext. CONSULT, Fax: 407-438-3922, E-mail: techconsult@mindspring.com

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EFFECTIVE AUGUST 1, 1999

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OUTSTANDING CHAPTER CHAIRMAN AWARD

It is final report time. Each Chapter Chairman is asked to prepare and submit a report on his/her chapter activities covering the period July 1998 through June 1999. To make your reports timely and of use in selecting the Outstanding Chapter Chairman, please adhere to the following schedule:

May 4 - Attend the Executive Committee meeting and submit the following items:

1. Final written report of chapter activities, including summary report submitted earlier, names and addresses of new chapter officers, budget data and a narrative summary.

2. Oral report of activities (5 minutes).

3. Your vote for the best chapter award as based on the activity reports and other criteria.

4. Any and all meeting reports (Form L-31) not yet submitted.

5. Compute the activity index for your chapter for each meeting and total the results for the year. A description of the Chapter Activity Index Formula is shown below:

$$AI = \sum_{i=1}^{N} (ai * Ai/M)$$

N = Total number of meetings
ai = 0.5 social meetings
1.0 professional meetings
1.5 technical meetings
Ai = Total attendance, including non-members
M = Total number of chapter members

The Outstanding Chapter Chairman Award will be presented at the June EXCOM meeting.

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Advisor: Dr. Takis Kasparis - VMBox 600 823-5913 - tnk@ece.engr.ucf.edu
Chairman: Michelle Proctor - VMBox 720 277-6802 - ieee@ece.engr.ucf.edu
Robotics: Luis Rosas - 384-8246 lgr86750@pegasus.cc.ucf.edu

IEEE ORLANDO INFORMATION CENTER
E-mail: j.medina@ieee.org
URL://www.parkave.net/business/ieeeorlando
Voice Mail (407)260-1676 - **Fax** (407)260-1636

Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Greetings Orlando! I want to take this opportunity to thank the nominees for the executive committee for their willingness to serve you, the members of the Orlando section. The executive committee works together with the local chapters to bring you opportunities for technical and professional development, help organize conferences, arrange for networking and social activities and to enhance the image of the engineering profession in Orlando. If you consider any of these things of value to you, please consider donating a little of your time. There are still plenty of opportunities to become involved. Chapter offices frequently go unfilled due to the lack of volunteers and we are always looking for speakers for the executive committee and chapter meetings. Please contact any member of the executive committee or your chapter chair to get involved.

Candidates for IEEE Orlando Section Officers Named

In accordance with the Section Bylaws, the following candidates for Section Officers for terms beginning July 1, 1999 and ending June 30, 1999, are as follows:

Chairman:	***Dr. Issa Batarseh***
Vice Chair.:	***Dr. David Flinchbaugh***
Treasurer:	***Dr. Gerald Holst***
Secretary:	***Mr. Robert Perla***

Each person was contacted by the Nominations Committee formed by **Mr. Jorge Medina, Dr. Kalpathy Sundaram and Dr. Udaya Vemulapati**, and was found to be qualified and willing to serve.

New IEEE Video Series Captures Engineering As Profession

Now available from the IEEE is the Engineering Profession Videotape Series, Volume II. Included in this volume are the six lectures that were recently given at North Carolina State University as part of the school's engineering graduate program. The six-videotape series seeks to prepare graduating seniors and recent graduates for entering new careers in industry and government. The following topics are presented:

· Engineering Ethics
· Maintaining Professional Vitality
· Employee Benefit Options
· Safety Engineering
· Managing Investments & Financial Planning · Intellectual Property Protection

The series also includes a PC disk containing abstracts and authors' biographies, and PowerPoint presentation notes.

1999/6 hrs./6 VHS Tapes
IEEE order numbers: NTSC - EV5533-QVE; PAL - EV5534-QVE IEEE List Price: $155.00; IEEE Member price: $125.00

Volume I of the Engineering Profession Videotape Series is also available for purchase from the IEEE.

Order from the IEEE Customer Service Department, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331, USA. For single sales, call 1-800-678-IEEE (1-732-981-0060 outside the USA and Canada); for company or institutional sales, call 1-800-701-IEEE; or fax 732-981-9667. Shipping and handling charges apply. E-mail: customer-service@ieee.org

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Meeting Announcements

Unless otherwise stated, non-IEEE members are welcome to attend the meetings listed here.
Members are encouraged to invite and bring guests to these events.

Professional Liability

Sponsor: Consultants' Network/ PACE

Topic: Individuals and organizations involved in designing or preparing plans and/or specifications, require professional liability insurance to cover many of the exposures that their work generates. This insurance gives further coverage then a general liability policy.

This presentation gives information about the exposures that professionals (engineers for example) have. Information about claims data that we know is discussed. The differences between General Liability and Professional Liability Insurance are detailed. The two main types of Professional Liability policies are explained.

Speaker: Elizabeth Teffner, MIS Administrator, Kuykendall Insurance Group.

Date: Tuesday, May 11, 1999

Time: 6:00 PM - Refreshments
6:30 PM - Presentation

Location: Orlando Public Library, 3rd floor.

Refreshments: Pizza and soda will be provided.

Reservations: Jorge Medina, Office: 407- 260-1676 ext. 002, Home: 407-245-9594, Email: j.medina@ieee.org.

Need a Career Boost?

Sponsor: IEEE Orlando Section/ PACE

Workshop: Your career success often depends on how well you can express yourself. If you want to improve your performance in business meetings, presentations, job interviews, conversations, sales, and problem-solving situations, a Toastmasters International Speechcraft workshop can help.

During the workshop you will prepare and present short talks and practice impromptu speaking in a relaxed, enjoyable atmosphere. By the end of the workshop you will be able to communicate with confidence and poise at work and at home.

Give your career a boost. Reserve your place in the Speechcraft workshop. The workshop will be held on four consecutive Monday evenings in June. To derive the maximum benefit from the workshop, you should expect to attend all four evenings. Workshop size is limited to 20, so please register early at Website http://www.roch-tech.com/ieee

Speakers: IEEE Member, Mark Roch and members of the Vista Toastmasters Club.

Date: Mondays, June 7, 14, 21 & 28 / 6:00 - 8:30 PM
Arrive by 6:00 PM, we begin promptly at 6:15 PM

Location: Downtown Orlando Public Library, third floor

Cost: $10.00 payable in advance, no refunds or credits.

Students: IEEE Student Members will be reimbursed $10.00 by the IEEE Orlando Section on completion of the entire four evening workshop.

Contact: No web access: Call Mark, weekdays, 407.465.0880

---------- ♦ ----------

SPREAD THE WORD

The Half-Year Dues Payment Period has begun...and it's a great time to recruit! Beginning 1 March and extending through 15 August, all new applicants to IEEE and its Societies can join for half of the full annual dues rates. This an ideal opportunity to encourage IEEE membership, as new applicants will receive service throughout 1999 at reduced rates. You may want to consider displaying applications for guests at your next Section meeting if it is not already being done.

In addition, IEEE Society membership and the Societies, optional publications are half price. If you are a renewed IEEE Member who has been considering trying a new Society membership, what better time than when lower rates are available?

Potential IEEE and Society members can go to the IEEE home page at www.ieee.org and select the link for IEEE Membership for information and an interactive application. If the Web site is not available to you, contact IEEE Member Services Department.

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EVENTS CALENDAR

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May	**04**	6:00 PM	Orlando Section/AES - **Invention in Everyday Life/EXCOM** - UCF, Dr. A. Berg 407-365-2214, aberg@gdi.net
May	**11**	6:00 PM	Consultants' Network/PACE - **Professional Liability** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
May	**23-26**		ISCAS '99 - **CAS** - Renaissance Orlando Resort, Orlando, FL
Jun	**01**	6:00 PM	Orlando Section - **EXCOM** - Location TBA, Dr. A. Berg 407-365-2214, aberg@gdi.net
Jun	**07**	6:00 PM	Orlando Section/PACE - **Speechcraft Workshop** - Orlando Public Library, M. Roch, http://www.roch-tech.com/ieee
Jun	**08**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org
Jun	**14**	6:00 PM	Orlando Section/PACE - **Speechcraft Workshop** - Orlando Public Library, M. Roch, http://www.roch-tech.com/ieee
Jun	**21**	6:00 PM	Orlando Section/PACE - **Speechcraft Workshop** - Orlando Public Library, M. Roch, http://www.roch-tech.com/ieee
Jun	**28**	6:00 PM	Orlando Section/PACE - **Speechcraft Workshop** - Orlando Public Library, M. Roch, http://www.roch-tech.com/ieee
Jul	**11-16**		International Symposium & URSI Nat'l Radio Science Meeting - AP - Renaissance Orlando Resort, Orlando, FL

***The Orlando Section Monthly* - Advertisement Rates**

The Orlando Section of the IEEE encourages placement of technical, professional, promotional, and commercial advertisement in the Orlando Section Monthly. This newsletter, read by more than 1,400 members and over 100 key area industries, is published 11 times a year, August through June. The due date for the receipt of the camera ready ad and payment is the **1st Tuesday of the month preceding the month of publication.**

Ad Size	Width x Depth	Rate	Discounted Rate (more than one issue)
Two-Page	16.5 x 10.5	$450	$390
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3/4 Page	8 x 7.5	$255	$225
2/3 Page	8 x 7 or 5 x 10.5	$225	$195
Half Page	8 x 5	$195	$165
1/3 Page	8 x 2.75 or 2.25 x 8	$165	$135
1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
1/6 Page	4 x 3 or 2.25 x 5	$80	$72
Business Card	3.5 x 2.25	$50	$35
Two Page Preprinted Insert	16.95 x 10.95	$292	$252
Full Page Preprinted Insert	8.45 x 10.95	$195	$165

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Volume XXXII, Number 11

THE ORLANDO SECTION MONTHLY

IEEE

A Monthly Publication of the IEEE Orlando Section

June 1999

HDTV: Engineering, Entertainment, Opportunity

Sponsors: Orlando Section/COM-SP Chapter

Speaker: A.J. Vigil, Ph.D., P.E. Dr. Vigil is a consultant in the areas of digital communications design and development, digital television, broadcast engineering and intellectual property management. Dr. Vigil is a registered Professional Engineer in the State of Florida, a member of the IEEE Communications Society, the IEEE Broadcast Technology Society and the Society of Motion Picture and Television Engineers (SMPTE).

Topic: A new replacement television broadcast standard has been adopted in the U.S. - HDTV is here! The FCC has mandated a rigid timetable for the conversion of all television broadcasting in the U.S. from NTSC (analog) to ATSC (digital), and TV stations all over the U.S. are in the process of converting to High Definition. Beautiful clear new High Definition Television sets are commercially available and are coming down the price curve. The character of television in the U.S. is changing.

What exactly is HDTV and where did it come from? How does it work? How does this new standard challenge broadcasters, and what are broadcasters doing about it? What does all this mean to us? How do we make the most of what HDTV has to offer? What are some of the engineering and business opportunities made available through this new standard? These issues are addressed in a lightly technical presentation, suitable for audiences with or without prior television or electronic communications training.

Date: Tuesday, June 1, 1999

Time: 5:45 PM to 6:00 PM Refreshments
6:00 PM to 7:00 PM Lecture
7:00 PM to 7:30 EXCOM meeting

Location: RSI Baseband Technologies, 6901 TPC Blvd., Suite 650, Orlando, FL 32822. For directions see website **www.basebandtechnologies.com/TPCMap.htm**

Contact: A.J. Vigil, 888-0050 ext. 21., aj.vigil@rsicom.com

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Sponsor: IEEE Orlando Section/Consultants' Network/PACE

Workshop: Your career success often depends on how well you can express yourself. If you want to improve your performance in business meetings, presentations, job interviews, conversations, sales, and problem-solving situations, a Toastmasters International Speechcraft workshop can help.

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Arrive by 6:00 PM, we begin promptly at 6:15 PM

Location: Downtown Orlando Public Library, third floor

Cost: $10.00 payable in advance, no refunds or credits.

Students: IEEE Student Members will be reimbursed $10.00 by the IEEE Orlando Section on completion of the entire four evening workshop.

Contact: No web access: Call Mark, weekdays, 407-465-0880

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Karl Lohman 6/4 - 11/4

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Dr. Al Berg, Section Chairman

CHAIRMAN'S CORNER

Greetings Orlando! It has been an honor to serve as chairman of the IEEE Orlando Section. I want to express my sincere gratitude to those who have supported us as we have tried to serve the needs of our members as best as we knew how. I also want to exhort those who haven't been involved to join the Orlando Section in our efforts. I look forward to continued service in the role of Awards Chairman and sage advice giver. Congratulations to the next Executive Committee and Chapter officers. Please give them your support. Also, don't forget to send Jorge Medina your current Email address - remember, the Orlando Section Monthly is going electronic!

1998 KEY CONFERENCE RECOMMENDATIONS

Based on the results of conference audits conducted by the IEEE Operations Audit Department during 1998, the following recommendations are suggested to IEEE conference organizers:

- Conference bank accounts should be closed when all outstanding payments have been received and all outstanding disbursements have been made. (Any late receipts or expenses, received after the bank account has been closed, can be deposited to or paid from the conference surplus account at IEEE.)

- All conference checking accounts must have the IEEE Staff Director of Financial Services as one of their authorized signatories.

- Exhibitor revenues and expenses should be reported separately in the income and expense portions of conference final financial reports rather than being netted in the income portion of the report.

- Multi-year conference management service contracts should clearly state the fee schedules applicable to each year, the reports required and the support needed for reimbursed expenses, if such expenses are to be paid on an actual cost basis.

- All conference loans should be processed through IEEE and the co-sponsoring entity (geographic unit, non-affiliated society) rather than advancing funds from one Conference to the next.

- The IEEE Tax Compliance Office should be contacted during the planning process for non-US conferences to assure that all tax issues are addressed before the conference takes place.

- All grant and award requests should be processed through the Tax Compliance Office's grant administrator.

- Memorandums of Understanding that are negotiated for conferences, co-sponsored with non-affiliated societies, should be specific with respect to such issues as grants, loans, taxes, surplus distributions and audits.

If your Section or one of its Chapters is involved with organizing a conference, please note that following these procedures will help avoid these items becoming issues when it's time to close the conference. For additional information, contact Ken Maze - IEEE Operations Audit.

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IEEE AWARDS $10,000 SCHOLARSHIP TO CANADIAN STUDENT AT INTEL SCIENCE FAIR

The IEEE presented a $10,000 college scholarship to Michael S. Belshaw of Hamilton, Canada, at the 50th-annual Intel International Science and Engineering Fair (ISEF), which was held from 2-8 May in Philadelphia, PA.

The IEEE judging team chose Michael from among 1,100 other contestants to receive the IEEE Presidents' Scholarship for his "outstanding achievement in creating a project that demonstrates an understanding of electrical engineering, information technology, or other IEEE fields of interest." Serving as judges for the IEEE were Members Don Bramlett of Detroit, MI; Peter Mauzey of Holmdel, NJ; and Barney Adler of Philadelphia, PA.

For his project, "Robotic Revolution," Michael constructed a computer-actuated robotic arm against which human beings can play Tic-Tac-Toe. "I wanted to demonstrate how, with the right computer programming, a robot can interact with its environment," he said. A high-school senior at Saint Mary Catholic Secondary School, Michael plans on studying aeronautical engineering in college.

IEEE was one of 60 associations and universities presenting at the 6 May awards ceremony. IEEE President Kenneth Laker gave the award to Michael before a crowd of nearly 1,500 people. Other IEEE entities presenting awards were the IEEE Computer Society (six awards ranging from $100 to $500) and the IEEE Philadelphia Section (eight awards ranging from $250 to $600).

"I am proud to say that this Scholarship is the largest monetary award that is being given by an association at this year's fair," Laker said. "This, along with the other IEEE prizes, demonstrates the IEEE's strong commitment to educational excellence world wide."

The 1999 IEEE Presidents' Scholarship will be funded by President Laker's budget. For the 2000 - 2002 Intel ISEFs, the Scholarship will be funded by the IEEE Foundation.

The world's largest pre-college science competition, the Intel ISEF is often called the "Olympics" of science fairs because of its international reach and scientific breadth. It is the only global science fair representing all life sciences-from biochemistry to zoology-for students in grades nine through twelve. This year's fair drew students from 47 countries, including Brazil, Israel, Russia, South Africa, and Japan. The finalists emerged from a field of approximately one million high-school students who competed in local ISEF-affiliated science fairs in 1998-1999. Nearly half the participants in this year's fair were young women.

For more information, contact Christy Bouziotis, IEEE Educational Activities, at c.bouziotis@ieee.org.

IEEE COMPLETES SLOAN PROJECT, PRODUCES MULTIMEDIA CAREER RESOURCES

Many students are so immersed with technical subject matter that they often overlook what is needed for success in the "real world." To provide students with the necessary information to plan for their careers, the IEEE has produced the following multimedia resources that take an in-depth look at careers for electrical engineers and computer scientists:

· The IEEE Student Career Web site at http://www.ieee.org/organizations/eab/sloancareers/sloancareers.htm · The CD-ROM, Careers for Electrical Engineers and Computer Scientists · And two videos, What's Out There and Getting Ready

"Although aimed at the college student, these materials are also helpful to high school students who are contemplating technical careers," said Peter Wiesner, director of continuing education for IEEE Educational Activities. "We want to encourage students to think about careers early, and provide them with the appropriate resources to do so."

The IEEE was one of eleven professional associations to receive funding from The Alfred P. Sloan Foundation to create products that explore the various career opportunities open to scientists, engineers, and mathematicians. To obtain information about the other participating associations, visit the Sloan Web site at <www.careercornerstone.org>.

The CD-ROM and videos are available for purchase from the IEEE Customer Service Department, 445 Hoes Lane, PO Box 1331, Piscataway, NJ, 08855-1331; E-mail: customer-service@ieee.org; Phone - 1.732.981.0060

To order the CD-ROM--$29.95 list and $19.95 for IEEE members-use code EC100-QVE; to order the What's Out There video--$24.95 list and $19.95 for IEEE members-use code EV5526-QVE; to order the Getting Ready video--$24.95 list and 19.95 for IEEE members-use code EV5522-QVE. For more information on any of these products, visit IEEE Web address <www.ieee.org/organizations/eab/careeresource.htm>.

Senior Member Update

The newly elected Orlando Section Senior Member from the April 1999 Admission and Advancement Committee meeting held in Phoenix, AZ is:

Name	Technical Affiliation
David J. Hagan	LEOS

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Aug	**03**	6:00 PM	Orlando Section - **EXCOM** - Location TBA, Dr. I. Batarseh 407-823-0185, batarseh@pegasus.cc.ucf.edu
Aug	**10**	6:00 PM	Consultants' Network - **Networking Meeting** - Orange County Library, J. Medina, 407-260-1676, j.medina@ieee.org

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1/4 Page	8 x 2.5 or 5 x 3.75	$135	$105
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Business Card	3.5 x 2.25	$50	$35
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