



The IEEE

Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NJ Computer Chapter:

Web Page Engineering

On Wednesday, September 19, 2001, the Computer Chapter of the IEEE North Jersey Section will host a presentation on "Web Page Engineering" by James D. Isaak of the Distinguished Visitor Program.

About the Talk

This talk will provide an overview of recommended web page engineering practices that aid in the creation of web sites that are productive and maintainable. Topics include:

Design and Life Cycle Considerations; Audience and Objectives; Client/Server Technology; XHTML, CSS, XML - Versions and Variations; Legal Implications: Intellectual Property Rights, Copyright, Trademarks, Proprietary Information; Accessibility for Disabled Persons; Privacy; Server, HTTP - Performance, Metrics, Robot Exclusion, Ease of Use; Metadata - Dublin Core, PICS, Robots, Keywords, Bandwidth Impact; Dates - Expiration/Review, Maintenance; International Considerations - Language, Practical Considerations, and Legal Awareness.

Web site development isn't just for engineers. Everybody is doing it, and like other areas of software engineering, you have hackers and well planned projects. However, a poorly engineered web site can be expensive to maintain, difficult to navigate, and even a legal liability. Building on the work of the Web Consortium and the Internet Engineering Task Force, the IEEE Computer Society Internet Best Practices Working Group has documented the best practices for web page engineering (IEEE Standard 2001-1999). The current revision (expected 2002 publication) is addressing US Government "Section 508" accessibility requirements, OECD/EU/Safe Haven Privacy guidelines, as well as expanded ease-of-use and improved site maintenance recommendations.

About the Speaker

James D. Isaak, (www.JimIsaak.com), Senior Member, IEEE, is sponsored by the IEEE Computer Society Distinguished

Visitor Program. He is currently an adjunct Professor at Daniel Webster College, NH, and at New Hampshire Community College, NH. He has over 30 years experience in the computer industry with Digital, Charles River, Data General, Intel and IBM Corporations. He is a member of the Computer Society's Board of Governors and has served as Vice President for Standards (1995 to 1998) and of Technical Activities (1999). He has authored numerous articles on open systems and one on the Information Highway as early as 1978 (Computer, Oct. 1978). He is currently a candidate for the IEEE Board of Directors.

All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends.

Time: 7:00 PM, Wednesday, September 19, 2001. Pre-meeting dinner at 5:30 PM, at Grasshopper Too, 26 Erie Ave, Wayne, NJ (973) 696-9698.

Place: BAE Systems, Inc., Plant 18, 150 Parish Drive, Wayne, NJ, directions: (973)-633-6000, Option 5.

Information: Howard Leach (908) 255-1634 or h.leach@ieee.org.

IEEE Vehicular Technology Conference-Sponsors Wanted

The IEEE Vehicular Technology Society will hold its Fall 2001 Conference on October 7-11, 2001 in Atlantic City. It is one of the major international mobile communications conferences in the world and will be hosted by the North Jersey chapter. Information about the conference is available at www.fallvtc2001.org.

Companies that are interested in sponsorship should contact Steve Wilkowski at swilkowski@lucent.com.

NJ PES/IAS:

Electric Power Cable Seminar

On December 7, 2001, the IEEE North Jersey Chapters of IAS/PES will sponsor a daytime seminar on the design, operations, testing electric characteristics and failure modes of medium and low voltage electric power cables.

Date: 9:00 AM - 3:00 PM, Friday, December 7, 2001.

Place: The exact location will be announced in the October Newsletter but it will be in the Morristown area.

Information: Ken Oexle (973) 386-1156 (k.oexle@worldnet.att.net).

September 2001

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NEWSLETTER STAFF

Editor.....Keith Saracinello
Business Manager.....Theresa Saracinello

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IEEE NJ SECTION HOME PAGE

<http://www-ec.njit.edu/~ieeenj/>

IEEE NJ SECTION NEWSLETTER HOME PAGE

<http://www-ec.njit.edu/~ieeenj/NEWSLETTER.html>

REPORT ADDRESS CHANGES TO:

IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, (732) 981-0060. It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE Newsletter" and other section mailings use a list provided by IEEE's national headquarters.

SECTION OFFICERS

Chairman.....Dr. Nirwan Ansari
nirwan.ansari@njit.edu (973) 596-3670
Vice-Chairman-1Rodney Cole
rgcole@ieee.org (973) 299-9022 Ext. 2257
Vice-Chairman-2Milton Korn
miltonkorn@aol.com (973) 365-2757
Treasurer.....Dr. Durga Misra
dmisra@njit.edu (973) 596-5739
Secretary.....Wayne Owens
wowens@crestron.com (201) 767-3400, ext. 226

Members-at-Large:

Bhanu Chivakula (b.chivakula@computer.org)
Naz Simonelli (naz@sprynet.com)
Dr. Richard Snyder (r.snyder@ieee.org)

The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Wayne Owens at (201) 767-3400, ext. 226, wowens@crestron.com.

2001-2002 Student Activities Kickoff

Welcome back to the beginning of a new year of student activities for the North Jersey Section. This year promises to be better than last with more activities and events. Some are familiar annual events and some are brand new. We hope you and your student branches will be participating in all of these events throughout the 2001-2002 academic year. Also since the year is just getting started, it is a good time for a refresher on what your branch must be doing to be recognized by the IEEE. Information about IEEE, student branch bylaws and forms to fill out is available on the website given below.

To start off with, if you have not had elections yet, it would be a good idea to hold them and report to IEEE with the officer election form. Also coming up is a leadership workshop that new (or potentially new) officers can attend to get essential training on running a branch. Your branch should fill out an annual plan of events in the fall and an annual report in the spring. Part of the reporting is on membership which qualifies the branch for per member rebates. Its free money for turning in the right forms by the right time. Speaking of money, your branch should also plan fundraisers for basic expenses.

So what's happening this year? Lots of things! Details of the event's exact location, date, time, directions, and registration will become available on the SAC website below. *Free Student Leadership Training Workshops, Professional Skills Development Workshop.* This workshop is planned for early November. *Paper Presentation Contest.* This contest (\$) is planned for mid February/early March.

What is happening really soon? The MTT-AP 16th annual symposium and mini-show on New Challenges in Wireless, High Speed Data and Microwave Technologies, will be held on Thursday, September 13th, 2001 at the Hanover Marriott in Whippany, NJ. This event is free and is looking for student volunteers to help out with registrations and exhibits. Contact Kirit Dixit at 516-642-3800.

Last, but not least, the SAC and GOLD committees are looking for volunteers who might be graduating soon and would like to help out in the North Jersey Section. To find out how you can help, contact Amit Patel at 973-284-2708 or a.j.patel@ieee.org and visit the new website at

http://ewh.ieee.org/r1/north_jersey/sac

NJ Section PACE & SMC Society: Micro Control Unit Seminar

During the month of October, through the joint cooperation of the Professional Activities Committee (PACE) and the Systems Man and Cybernetics (SMC) Chapter, the Section will present a seminar on MCUs. Our guest speaker and presenter will be John Magrane, Sr. FAE, from Microchip Technology Inc. Information about Microchip Technology Inc. can be found at their web site www.microchip.com.

About the Seminar

The Seminar "Introduction to PICmicros®" will be divided into three sessions and presented on October 4, 18, 25th. For "Hands On Experience" you are invited to bring your laptop computer. **More detailed information will be included in our October Newsletter.**

Session 1, Oct 4th

Architecture Overview, Program and Data Memory Organization, Register File Concept, Peripherals, Special Features.

Session 2, Oct 18th

Instruction Set Overview, Encoding, Bit Byte and Literal Instructions, PIC16 and PIC18 comparisons.

Session 3, Oct 25th

Development Tools, MPLAB IDE (Project Manager, Assembler, Simulator) ICE2000 Emulator, ICD, Programmers, C Compilers.

About the Speaker

John Magrane is a Sr. FAE, Group Leader for Microchip Technology Inc. He Graduated from Rensselaer Polytechnic Institute with a BS in Physics and minors in Electrical Engineering and Management. John has hardware and software design experience with Raytheon and LORAL. He has 7 years experience as an FAE supporting Microcontrol based designs. The last 2 1/2 John has been with Microchip Technology Inc.

Time: Approximately 6:30-9:00 PM, Thursdays, October 4, 18, 25, 2001.

Place: Fairleigh Dickinson University auditorium RA-100, Robison Annex, Teaneck, NJ.

Attendance/Information: No admission fee, but limited to members of IEEE and the American Engineering Association, Inc., (AEA). For IEEE membership info, contact IEEE at www.ieee.org or Mike Liechenstein, m.liechenstein@ieee.org, (973) 471-0721. For AEA membership, contact the AEA at www.aea.org or Richard Tax at rtax@bellatlantic.net, (201) 664-6954.

North Jersey Section Activities

September 2001

Sept. 5–“NJ Section Executive Committee Meeting” – 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Wayne Owens at (201) 767-3400 ext. 226 or wowens@crestron.com.

Sept. 13–“2001 MTT/AP Symposium and Mini-Show” – MTT-S/AP-S Chapter, 9:15AM - 6:00PM, Hanover Marriott, Whippany, NJ. Kirit Dixit (516) 642-3800, Willie Schmidt (973) 492-0371, or George Kannell (973) 386-4170.

Sept. 19–“Web Page Engineering” - NJ Computer Chapter, 7:00 PM, BAE Systems, Inc., Plant 18, 150 Parish Drive, Wayne, NJ. Howard Leach, (908) 255-1634, or h.leach@ieee.org.

Sept. 20–“Partial Discharge Monitoring for Predictive Maintenance” – NJ IAS/PES Chapters, 7:00 PM, PSE&G Training Center, Edison, NJ. Ken Oexle (973) 386-1156.

Sept. 27–“To Surface Mount Or Not To Surface Mount... An Attempt To Find Answers” – NJ Consultants' Network, 7:30 PM, KDI Triangle, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-4500 or www.TechnologyOnTap.org.

Upcoming Meetings

Oct. 3–“NJ Section Executive Committee Meeting” – 7:00 PM, ITT, 100 Kingsland Rd, Clifton, NJ. Wayne Owens at (201) 767-3400 ext. 226 or wowens@crestron.com.

Oct. 4–“Micro Control Unit Seminar (1st Session)” – NJ PACE and SMC Society, 6:30 – 9:30 PM, Fairleigh Dickinson University auditorium RA-100, Robison Annex, Teaneck, NJ. Dr. Mike Liechenstein (973) 471-0721 (m.liechenstein@ieee.org) or Richard Tax (201) 664-6954 (rtax@bellatlantic.net).

Oct. 7-11–“2001 IEEE Vehicular Technology Conference”, NJ VTS Chapter, Sheraton Convention Center Hotel/AC Convention Center, Atlantic City, NJ. For more details see <http://www.fallvtc2001.org> or contact Art Greenberg at a.h.greenberg@ieee.org or (973) 386-6673.

Oct. 12–“International Conference on Computing and Information Technologies (ICCIT'2001)”, Montclair State University, Upper Montclair, NJ. For more details see <http://www.csam.montclair.edu/~ICCIT2001/> or contact ICCIT'2001 Secretariat at iccit2001@pegasus.montclair.edu or (973) 655 - 4250.

Oct. 18–“California Energy Situation” – NJ IAS/PES Chapters, 7:00 PM, PSE&G Training Center, Edison, NJ. Ken Oexle (973) 386-1156.

Oct. 18–“Micro Control Unit Seminar (2nd Session)” – NJ PACE and SMC Society, 6:30 – 9:30 PM, Fairleigh Dickinson University auditorium RA-100, Robison Annex, Teaneck, NJ. Dr. Mike Liechenstein (973) 471-0721 (m.liechenstein@ieee.org) or Richard Tax (201) 664-6954 (rtax@bellatlantic.net).

Oct. 25–“Micro Control Unit Seminar (3rd Session)” – NJ PACE and SMC Society, 6:30 – 9:30 PM, Fairleigh Dickinson University auditorium RA-100, Robison Annex, Teaneck, NJ. Dr. Mike Liechenstein (973) 471-0721 (m.liechenstein@ieee.org) or Richard Tax (201) 664-6954 (rtax@bellatlantic.net).

Nov. 8–“Micro Devices” – EDS/C&S Chapters, 7:00 PM, NJIT, 202 ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207, Dr. Durga Misra (973) 596-5739 (dmisra@njit.edu), or Dr. Edip Niver (973) 596-3542.

Nov. 15–“Project Management for Telecommunications Services” - NJ EMS, 7:00 – 9:00 PM, NJIT, 202 ECE Center, Newark, NJ. Wayne Owens at (201) 767-3400 Ext. 226 or wowens@crestron.com.

Dec. 7–“Electric Power Cable Seminar” – NJ IAS/PES Chapters, 9:00 AM – 3:00 PM, Morristown area (exact location TBA). Ken Oexle (973) 386-1156.

Members and Non-Members Welcome

PLEASE POST

NJ EDS, C&S Chapters:

Micro Devices

On November 8, 2001, the IEEE NJ Section Electron Devices, and Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "Micro Devices." The speaker will be William Trimmer.

About the Talk

Man has been developing tools and devices on the size scale of his hands for millennia. Cooperative efforts have also made substantially larger mechanical systems such as cranes, ships, and even canals and roads possible. Strangely enough, small scale structures have not historically been put to the same good advantage. Recent tools and fabrication techniques are changing this.

A few of the numerous opportunities include genetic engineering, micro-surgery, drug delivery, the science and engineering of small scale phenomena, pressure sensors, accelerometers, micro valves and fluid controllers, micro actuators, distributed intelligence, communications and many others.

This talk will provide an overview of the history, recent developments, and the potential for the future of the field of micromechanics and MEMS. The capabilities of different technologies and promising applications will be examined. The audience is encouraged to ask questions about their areas of interest.

About the Speaker

William Trimmer is one of the original researchers in the field of micro mechanics. He organized and was Editor of the IEEE/ASME Journal of Microelectromechanical Systems for six years, and started and was Editor of the Micromechanics Section in the Sensors and Actuators Journal. He organized and co-chaired the first workshop in the international series of Microelectromechanical Systems Workshops, and he published the IEEE book *Micromechanics and MEMS*. He has co-developed a micro optical fiber switch, a shape memory alloy actuator, an inch worm motor, a genetic engineering tool, and a sacrificial technique for making micro devices.

All Welcome!

You do not have to be a member of the IEEE to attend.

Time: 7:00 PM, Thursday, Nov. 8, 2001. Free buffet will be starting at 6:00 PM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at www.njit.edu.

Information: Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Durga Misra (973) 596-5739 (dmisra@njit.edu) or Dr Edip Niver (973) 596-3542 (NJIT).

NJ EMS Chapter:

Project Management for Telecommunications Services

On November 15, 2001, the IEEE North Jersey Section Engineering Management Chapter will host a presentation on "Project Management for Telecommunications Services" by Dr. Mostafa Hashem Sherif.

About the Talk

The discipline of Project Management has been dealing mostly with industrial projects in construction, aerospace and defense. In the last decade, many different industries including software engineering have applied project management techniques to meet the triple constraints of cost, quality and schedule. However, very few textbooks or courses on project management have addressed the special needs of project managers in service organizations.

The focus of this talk is on telecommunication services. First, we give examples to show how the approach to project management differs in this situation from that of equipment manufacturing or software development. We then show how these differences affect the context in which project management is applied in the areas of scope management, quality management and risk management.

About the Speaker

Mostafa Hashem Sherif is a Principal Member of the Technical Staff at AT&T Laboratories. He received his B.Sc. in Electronics and Communications and M. Sc. in Electrical Engineering from Cairo University, Egypt in 1972 and 1975 respectively, and PhD in Engineering from the University of California, Los Angeles in 1980. In 1996, he obtained his Masters of Science in the Management of Technology from Stevens Institute of Technology, Hoboken, NJ.

Dr. Sherif is a senior member of the IEEE, a member of Sigma XI, a Certified Project Management from the Project Management Institute, a member of the *Awards and Recognition working committee of the AT&T Project Management Council* and a member of the evaluation committee for the *Commission on Science and Technology, State of New Jersey*, reviewing pre-proposals for the R&D Excellence Program. Since 1993, he has been a standards editor for the *IEEE Communications Magazine*. In 2000, he was appointed to the board of the *IEEE Press* as the representative of the IEEE Communications Society.

He is a recognized international expert on standards for packetized voice and

digital signal processing in transmission equipment. He was a major contributor to the following key ITU recommendations: 1) ADPCM G.726/G.727 which are used in many telecommunications network applications, 2) G.764/G.765 which are the benchmark for voice packetization and compression in telecommunications network equipment, 3) G.511 for testing facsimile processing network equipment and 4) G.720 which is the standard method for testing voice coders with data signals. He has also been the main contributor to Committee T1 reports on voice packetization and echo cancellation. He is currently one of AT&T participants at the ATM Forum. He was awarded the AT&T Labs Standards Award by the President of AT&T Labs in 1998. This year, he was invited as a speaker at the ITU Megacom-2004 symposium in April 2001 to advise the study group 16 on its future work plan.

He is a founding member of the series of conference on International Conference on the Management of Technology sponsored by the International Association for the Management of Technology. He was invited on several occasions by the National Science Foundation to participate in its activities on innovation and technology management. He is also a founding member of the IEEE International Symposium on Computers and Communications and was the co-general chair of the 2000 Symposium. He has been the guest editor for *Speech Communications* (June 1993) and the *IEEE Communications Magazine* (September 1997 and April 2001).

He is the author of the best seller *Protocols for Secure Electronic Commerce*, CRC Press, 2000, now in its second printing. The French version was published by Eyrolles, France under the title *La Monnaie électronique* and is co-authored with Professor A. Sehrouchni.

All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends.

Time: 7:00 - 9:00 PM, Thursday, November 15, 2001.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at www.njit.edu.

Information: Wayne Owens, (201) 767-3400 x226 (wowens@ieee.org).

NJ Consultants' Network:

To Surface Mount Or Not To Surface Mount... An Attempt To Find Answers

On Thursday, September 27, 2001, the IEEE Consultants' Network of Northern NJ (CNNNJ) will present a talk on "To surface mount or not to surface mount...", by Jim Disser.

About the Talk

Surface mount technology continues to evolve as integrated circuit complexity drives IC package designs. Pin counts continue to rise. The demand for smaller footprints and higher pin counts has drawn the latest IC designs to microscopic packages. 10 years ago there were only a few IC package styles – today there are dozens. The use of thru-hole technology, while still required for large components, will continue to dwindle as the technical and economic advantages reduce the market for the older packages styles. Sooner or later even the smallest manufacturers will need to address the question – to surface mount or not to surface mount?

The decision to switch to surface mount is complex. Working with this technology requires new tools and skills. There are numerous technical, economic, and logistical demands involved in switching to surface mount technology. As surface mount technology evolves, contract manufacturing will evolve as well. Close partnerships will be needed between the contract manufacturer and the engineer, as well as the purchasing agent. This talk will review how RealTime's contract manufacturing services facilitate this partnership, reducing costs and improving designs by making the most advanced surface mount technology economical and easily accessible to anyone for even the smallest projects.

About the Speaker

Jim Disser founded Infrared Of New Jersey, Inc (www.irnj.com) in 1986. His designs include the company's line of optoelectronic "People Sensors" as well as numerous custom OEM products including controls for the HVAC industry. After 15 years of product design and manufacturing, Jim created a new division of IRNJ, RealTime Manufacturing Co. (www.realtimemfg.com) to address the need for a new kind of contract manufacturer, that solve the types of problems encountered in IRNJ.

About the Consultants' Network

The IEEE Consultants' Network of Northern NJ was founded in 1992 to encourage and promote the use of

independent technical consultants by business and industry.

All Welcome!

You do not have to be a member of the IEEE or of the Consultants' Network to attend. Networking after the meeting is encouraged. There is no charge for admission.

Time: 7:30 PM, Thursday, September 27, 2001.

Place: KDI Triangle, 60 S. Jefferson Road, Whippany, NJ.

Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-4500 or visit our website at www.TechnologyOnTap.org.

NJ PES/IAS:

California Energy Situation

On October 18th, the IEEE North Jersey Chapters of IAS/PES will sponsor a session on the evolving energy supply and pricing events being experienced on the west coast.

About the Talk

California was the first state to restructure both its wholesale and retail electricity markets. Since the fall of 2000, the fabric of their innovation has begun to unravel, due to a combination of bad design and bad luck. This presentation will discuss the history of California's restructuring efforts and its implications for the electricity industry.

About the Speaker

The speaker will be Laura Manz, Manager-Transmission Planning and Technical Services at PSE&G.

Date: 7:00 PM, Thursday, October 18, 2001.

Place: PSE&G Training Center, Edison, NJ. Directions: Route 287 to Route 1 North, about 500 feet. Right on Pierson Road. PSE&G first drive on left.

Information: Ken Oexle (973) 386-1156 (k.oexle@worldnet.att.net).

Chairman's Column: Would You Like To Be In Charge?

If you are a member of one of the IEEE Technical Societies represented in the North Jersey Section, consider participation at the officer level. One of the major functions of the IEEE is the provision of good technical meetings for members. The usual venues for such meetings, within our Section, are regular gatherings of each technical Society (MTT, AP, EDS, CAS, LEOS, Power Engineering, Engineering Management, Computer, etc.) at which a distinguished speaker presents a technical lecture. These meetings do not happen without great effort on the part of the organizing officers! Speakers are invited, entertained, meeting notices published, web articles written, Newsletter articles published, reports written, budgets amended, etc. Why would anyone in their right mind want to be one of these hard-working officers? The reward is in the doing, the professional achievement, the professional contacts, the networking, ..., and the service to one's fellow engineers. The North Jersey Section is looking for "a few good people" to step in to the Chapter Officer's jobs. The philosophy within IEEE is to "turn-over" the officer positions every few years. Any volunteers? If interested, please e-mail the Section Chair (nirwan.ansari@njit.edu), one of the current Section officers, or simply speak up at the next meeting of your particular Society.

NJ PES/IAS:

Partial Discharge Monitoring for Predictive Maintenance

On September 20th, the IEEE North Jersey Chapters of IAS/PES will feature a talk on the subject of "Partial Discharge Monitoring for Predictive Maintenance". The Speaker will be Gabe Paoletti, P.E. of Cutler-Hammer Engineering Services and Systems.

About the Talk

Advances in partial discharge monitoring technology are making it an effective on-line predictive maintenance tool for medium voltage equipment such as motors, generators, switchgear, transformers and power cables. The benefits of on-line testing allow equipment analysis and diagnostics to be performed during normal equipment operation. Corrective actions can then be planned and implemented, resulting in reduced unscheduled downtime. Understanding the principles of partial discharge technology, and the relationship to early detection of insulation deterioration, is essential to the proper evaluation and use of this tool for predictive maintenance.

This talk will promote your better understanding of partial discharge technology, along with the various implementation and measurement techniques that have evolved in the industry today. The speaker will also discuss corona damage, surface tracking, partial discharge data interpretation, corrective actions for electrical distribution equipment, and IEEE Standard P1434. The meeting should provide a useful update for all practicing electrical engineers.

About the Speaker

The speaker, Gabriel Paoletti, received his BSEE degree from Drexel University, Philadelphia, PA in 1976. He has over 25 years engineering service experience with Westinghouse, ABB, and Cutler-Hammer. His electrical distribution experience includes field testing, predictive and preventive maintenance, applications engineering, failure analysis, and power systems studies. Mr. Paoletti is a registered professional engineer in the states of Pennsylvania and Delaware, and is currently Product Line Manager for Predictive Diagnostics for Cutler-Hammer.

Date: 7:00 PM, Thursday, September 20, 2001.

Place: PSE&G Training Center, Edison, NJ. Directions: Route 287 to Route 1 North, about 500 feet. Right on Pierson Road. PSE&G first drive on left

Information: Ken Oexle (973) 386-1156 (k.oexle@worldnet.att.net).

Newly Designed IEEE- USA Consultants Database Introduces Clients to Technical Consultants

WASHINGTON (27 July 2001) - The newly designed IEEE-USA Consultants Database is now live on the Web at www.ieeeusa.org/consultants. This premier service matches prospective clients with the world's finest electrotechnology and information-technology professionals-for-hire.

The completely rebuilt database offers many new and enhanced features, making it more powerful and easier to use. The site, which last year logged more than 30,000 visits, is the ideal online meeting place for consultants and prospective clients.

For consultants, the database includes a profile of their credentials, contact information and a link to their Web site. Visibility can be increased through the purchase of online banner ads, and data can be updated instantly at any time. A one-year membership is just \$75 for IEEE members and \$99 for non-members.

Clients, too, will be pleased with the enhanced database. The upgraded search functions - including a new questionnaire-based tool - make it easier to find the right consultant for any project. Clients can also post projects on the new assignment board. There is no charge to clients to search or post on the site.

A searchable compact disk containing the entire database will be available later in the year. For a free copy, call IEEE-USA at 202-785-0017 (x8367) or send an e-mail to consultantsdatabase@ieee.org.

IEEE-USA is an organizational unit of the IEEE created in 1973 to promote the careers and public-policy interests of the more than 230,000 electrical, electronics, computer and software engineers who are US members of the IEEE. The IEEE is the world's largest technical professional society. For more information, visit us online at <http://www.ieeeusa.org>.



IEEE North Jersey Section Newsletter Advertising

The “NEWSLETTER” is the non-profit professional publication of the North Jersey Section of the Institute of Electrical and Electronics Engineers, Inc.

Published monthly except June (electronic only) and July, it is distributed to approximately 5,000 qualified members of the section.

Editorial content is pertinent and timely. It contains current information and details about special meetings, field trips, and seminars scheduled during the month and for future dates.

NEWSLETTER readers are influential in the Electrical and Electronics industries. They are in decision-making positions or can influence decisions in this important field.

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Classified and Per Inch	30	25	25

THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.
IEEE NORTH JERSEY SECTION
 MTT-Society and AP-Society Joint Chapter



PRESENT

16TH ANNUAL SYMPOSIUM AND MINI-SHOW

FOCUS: NEW CHALLENGES IN WIRELESS, HIGH SPEED DATA AND MICROWAVE TECHNOLOGIES

THURSDAY, SEPTEMBER 13, 2001

HANOVER MARRIOTT, 1401 ROUTE 10 EAST WHIPPANY, NJ 973-538-8811

The conference presents a series of 12 lectures describing the state of the art in Microwave, RF, Optical and Wireless, technologies by leaders in their respective fields.

Presentation Schedule

Time	Topic	Speakers	Title	Affiliation
9:15	Opening Remarks	George Kannell	Technical Sessions Chair	Lucent Technologies
9:30	Recent Advances in the Implementation of Quasi-Optimum Filters	Dick Snyder	President and Founder	RS Microwave Company
10:00	OC-192 Transimpedance Amplifier Design	Rajah Vysyaraju	Principal Design Engineer	Anadigics
10:30	Break			
11:00	Microwave Component Design Tradeoffs for OC192 SDH/SONNET Systems	John Odell	Senior RF Design Engineer	Communications Techniques, Inc.
11:30	Jitter Analysis Methods for RF Crystal Oscillators	David Chandler	Senior Design Engineer	Corning Frequency Control
12:00	Lunch			
1:00	RFIC Design Using Advanced Integrated EDA Tools	Tony Donisi	Senior Applications Engineer	Ansoft
1:30	IEEE 802.11 - The Emerging Wireless Standard	Len Decostanzo Jim Nadolski	Technical Consultant	Intersil
2:00	Challenges of High Speed Switch/Router Design*	Jian-Guo Chen	Member of Technical Staff	Agere Systems
2:30	Linearized Power Amplifier Simulation and Test in an Integrated Design Environment	Dave Erickson	Senior Applications Engineer	Agilent Technologies
3:00	Break			
3:30	Wireless Base Station Amplification Overview	Joe Lipowski	Chief Technical Officer	Celiant
4:00	An Intelligent Antenna Approach for cdma2000 Systems	Roger Benning	Technical Manager	Lucent Technologies
4:30	Maximizing Cellular Performance Through Optimal Antenna Orientation	Gee Rittenhouse	Director of Wireless Technology Research	Lucent Technologies
5:00	Deployment and Service Scenario toward 3G Mobile Systems	Gerry J. Flynn	Dir. Advanced Technology Strategy / Standards	Verizon Wireless
5:30	Closing remarks	Kirit Dixit	Chair, North Jersey	IEEE MTT/AP-s

* Courtesy North Jersey COMSOC Chapter.

10:00 AM TO 6:00 PM - MINI SHOW FEATURING LATEST PRODUCTS

Details of the schedule, speakers and topics can also be found at the IEEE North Jersey Section Homepage:

<http://www-ec.njit.edu/~ieeenj/NEWSLETTER.html>

FOR FURTHER INFORMATION CONTACT KIRIT DIXIT (516-642-3800), WILLIE SCHMIDT (973-492-0371), OR GEORGE KANNELL (973-386-4170).

THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW
 COMPLIMENTARY BEVERAGE/FOOD AVAILABLE