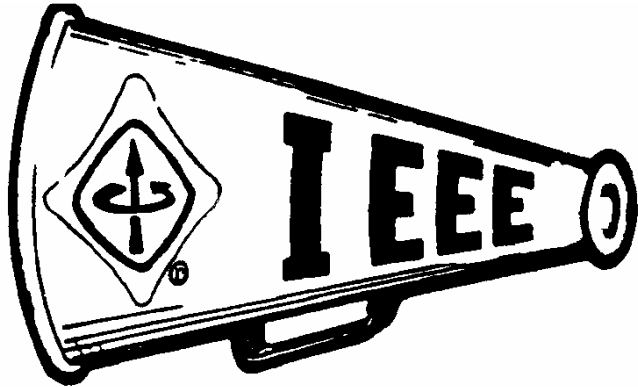


The Valley Megaphone



Newsletter of the
**Institute of Electrical and
Electronics Engineers, Inc.**
Phoenix Section
February 2008, Volume XXII, Number 2

Executive Committee

Past Chair

Rao Bonda, 480-413-6121
r.bonda@ieee.org

Chair

Keith Holbert, 480-965-8594
holbert@asu.edu

Vice Chair

Debendra Mallik, 480-554-5328
dmallik@ieee.org

Secretary

Henning Braunsch, 480-552-0844
braunsch@ieee.org

Treasurer

Jim Hudson
jhhudson@srpnet.com

Publicity

Eric Palmer
ecpalmer@ieee.org

PACE

Mike Andrews, 480-991-1619
m.andrews@ieee.org

Membership

Victor Prokofiev
victor.prokofiev@intel.com

Student Activities

Jim Drye, 480-413-5685
jdrye@ieee.org

Conferences

Russ Kinner, 602-997-2353
r.kinner@ieee.org

Awards

Vasudeva P. Atluri, 480-554-0360
vpatluri@ieee.org

Inter-Society

Mike Andrews, 480-991-1619
m.andrews@ieee.org

Web Master

Monica H. Braunsch
mhbraunsch@ieee.org

This Issue of The Valley Megaphone Features:

Contacts:

- **Executive Committee (page 1)**
- **Chapters and Branches (page 1)**
- **Student Branches (page 2)**

Contents:

- **Phoenix Section Executive Committee Meeting (page 2)**
- **Life Members Chapter in Phoenix (page 2)**
- **NSF Scholarship for Embry Riddle (page 2)**
- **Phoenix Section Annual Banquet (pages 3 – 5)**
- **Phoenix Area Consultants Network Meeting (page 6)**
- **Computer Society Meeting (pages 7 - 8)**
- **WAD meetings (pages 9 – 10)**
- **GENSIPS 2008 (pages 11 - 12)**
- **Engineering and the Environment Conference (pages 13 - 14)**
- **Student Paper and Scholarships (page 15 – 25)**
- **Mentoring Connection (page 26)**
- **RE-SEED (page 27)**

IEEE Phoenix Section Executive Committee meeting minutes can be found at: <http://www.ieee.org/phoenix>

Please send announcements for Valley Megaphone to Eric Palmer: ecpalmer@ieee.org.

Chapters

Communication & Signal Processing

Gang Qian
gang.qian@asu.edu

Computer Society

Joy Shetler
jsshetler@juno.com

Consultants Network (PACN)

Vaughn L. Treude, 602-750-3662
vaughn@nakota-software.com

CPMT Society

Qing Zhou
qing.a.zhou@intel.com

Education Chapter

Martin Reisslein, 480-965-8593
reisslein@asu.edu

EMBS Chapter

Ahmed Abdelkhalik
ahmed_a@acm.org

EMC Society

Harry Gaul, 480-441-5321
harry.gaul@ieee.org

GOLD

Mat Mets
Matt.Mets@freescale.com

Power Engineering Society

Barbara McMinn
barbara.mcminn@aps.com

Solid State Circuits

Bertan Bakkaloglu
bertan@asu.edu

Teach-in-service

Mike Poggie
Mike.Poggie@ieee.org

Waves & Devices Society

Chuck Weitzel, 480-413-5906
Chuck.weitzel@freescale.com

Life Members

Rao Thallam
rsthalla@srpnet.com

The Valley Megaphone is the newsletter of the Phoenix Section of the Institute of Electrical and Electronics Engineers. It is published monthly and reaches about 4000 members. Submit articles, advertisements, and announcements to Eric Palmer at the above email address. Deadline for announcements and advertisements is the third Friday of the month prior to publication. Advertising Rates: Full page: \$200, 3/4page: \$125, 1/2 page: \$75, 1/3 page: \$50, 1/4 page: \$25. Change of address/email? Call toll free 1-800-678-IEEE. Please allow 6-8 weeks. Section Web Page is: <http://www.ieee.org/phoenix>

<p>Student Branches</p> <p>ASU Main, Engineering Chair: Cory P. Murphy ieeasuchair@gmail.com Advisor: Cihan Tepedelenlioglu, (480) 965-6623, Cihan@asu.edu</p> <p>ASU Main, Computer Society Chair: Luis Tari luis.tari@asu.edu Advisor: Joseph Urban, 480-965-3374, joseph.urban@asu.edu</p> <p>ASU Polytechnic Chair: Brian Siskoy bsiskoy@gmail.com Advisor: Barbara Rempel Barbara.Rempel@asu.edu</p> <p>DeVry, Phoenix Chair: Mason Surerus</p> <p>DeVry, Computer Society Chair:</p> <p>NAU, Engineering Chair: Advisor: Phil Mlsna, 928-523-2112 Phillip.Mlsna@nau.edu</p> <p>Embry-Riddle, Prescott Chair: Maria Nzmebi Ngomba ngomb7db@erau.edu Advisor: John E. Post postj@erau.edu</p>	<p>Phoenix Section Executive Committee Meeting – First Tuesday of the month.</p> <p>Time: 6:00 pm to 8:00 pm</p> <p>Place: Phoenix Airport Hilton, 2435 South 47th Street Phoenix, AZ, 85034 Phone: 480-804-6017</p> <p>Directions: From 143, exit University Ave, go west, turn right on 47th street.</p> <p>More Info: Meetings held first Tuesday of month. No meetings in July and August. All interested IEEE members are welcome to attend.</p> <p>Contact: Keith Holbert, Phoenix Section Chairman, holbert@asu.edu</p>
---	--

Life Members Chapter in Phoenix Section

A petition to form Life Members Chapter in Phoenix section has been submitted and approved by the Section executive Committee and Region 6 Director Loretta Arellano.

As of last month there are 435 Life Members in IEEE Phoenix Section. Life Members have long IEEE experience and can contribute significantly to the Section. Life Members Chapter like GOLD Members Chapter, and Consultants Network is an affinity group recognized and supported by the IEEE.

If any Life Member is interested in becoming Chapter Executive Committee Chair, Vice Chair, Secretary, Treasurer or Program Committee Chair, please contact Rao Thallam: Phone (602) 236-8064, Cell: (602) 818-0549, e-mail: thallam@ieee.org

NSF Scholarships in Electrical & Computer Engineering at Embry-Riddle Aeronautical Univ., Prescott, AZ

Embry-Riddle Aeronautical University is offering individual student scholarships funded through a grant provided by the National Science Foundation of up to \$10,000 per academic year (up to four years with qualifying criteria) to academically talented and financially challenged students accepted into either the Electrical Engineering or Computer Engineering degree programs offered at the Prescott, Arizona Campus. These scholarships are provided to assist students in paying Embry-Riddle costs of attendance. Scholarship recipients also receive a minimum assurance of \$5,000 per year in other scholarships and grants funded by Embry-Riddle. These scholarship amounts are in addition to assistance for which the student qualifies from other federal and state programs. For complete information visit <http://www.erau.edu/pr/news/1007nsf.html> or contact Ed Post at john.post@erau.edu.

For more information visit <http://www.erau.edu/pr/news/1007nsf.html> or email john.post@erau.edu



**IEEE PHOENIX SECTION
ANNUAL BANQUET
Saturday, February 9th, 2008
At**



**Hilton Phoenix Airport
Grand Ballroom**
2435 South 47th Street
Phoenix, Arizona 85034
Tel: (480) 894-1600

Program: 6:00 PM – 7:00 PM Registration and Social Hour with Cash Bar
7:00 PM – 8:30 PM Dinner and Keynote Presentation
8:30 PM – 9:30 PM Section Awards Program

Keynote: “Technology and Phoenix – Who cares? (Everyone should, they just don’t know that)”
Mr. Robert E. Mittelstaedt, Jr., Dean and Professor of Management
W.P. Carey School of Business, Arizona State University, Tempe, Arizona

Phoenix has been one of the fastest growing cities in the U.S. for decades. With good weather, available jobs and new houses, offices and malls are popping out of farmland like spring crops. Most people believe that our economic growth has been driven by real estate and construction. Economic growth, like many things in life, is often more complex than it appears. This talk will address myth, reality, concerns and the role of technology related companies in Phoenix’s future.

Speaker Bio: Mr. Mittelstaedt has served as Dean of the W. P. Carey School of Business and Professor of Management at Arizona State University since June 2004. Between 1973 and 2004 Mittelstaedt served in numerous leadership positions with The Wharton School, University of Pennsylvania including 14 years as vice dean, executive education. During 1985-1990 he co-founded, developed and sold Intellego, Inc., a company engaged in practice management, systems development and service bureau billing operations in the medical industry. He has been actively involved in strategy, marketing, management, systems, and corporate governance consulting for some of the world’s largest corporations and many smaller startup companies. His teaching over the last decade has been with executives in the areas of strategy, IT and corporate governance; and undergraduate courses in entrepreneurship. He is the author of “Will Your Next Mistake Be Fatal? Avoiding the Mistake Chain That Can Destroy Your Organization,” (Wharton School Publishing, 2005) and co-author of “knowledge@wharton on Building Corporate Value,” (Wiley 2002). He serves on the boards of directors of three public companies, Innovative Solutions & Support (NASDAQ: ISSC), Laboratory Corporation of America (NYSE: LH) and W. P. Carey & Co. LLC (NYSE: WPC). Mittelstaedt received his B.S. (Mechanical Engineering) from Tulane University, served five years as a U.S. naval officer in nuclear submarines, and received an MBA from the Wharton School of the University of Pennsylvania. He is a licensed commercial pilot with multi-engine and instrument ratings.



SECTION AWARDS PROGRAM

Member

Young Engineer of the Year, Engineer of the Year

Advance Member Grade

Fellows, Senior Members

Chapter/Society

Individuals, Teams, Organizations, Best Society Chapter

Non-IEEE Member

Contributions to the Engineering Profession

Corporate

Large Company of the Year, Small Company of the Year

Education

Outstanding IEEE Student Branch & Student Branch Leader

Outstanding Faculty & Pre-College Educator
Phoenix Section Student Scholarships

Special Chair

Chair Special Recognition, Phoenix Section 2006 Officers

Future Cities Competition

Phoenix Section Communication Award

For Further Information Please Contact Annual Banquet Organizing Committee Members:

Dr. Vasudeva P. Atluri (480) 554-0360
Mr. James E. Drye (480) 413-5685
Mr. Debendra Mallik (480) 554-5328

Dr. Rao Bonda (480) 413-6121
Dr. Keith E. Holbert (480) 965-8594



IEEE PHOENIX SECTION ANNUAL BANQUET



Saturday, February 9th, 2008

At



Hilton Phoenix Airport

Grand Ballroom

2435 South 47th Street
Phoenix, Arizona 85034
Tel: (480) 894-1600

Registration Form

Banquet Fees:

IEEE Members and Guests	\$35.00
IEEE Student Members	\$25.00
IEEE Student Member Guests	\$35.00
IEEE Chapter / Society Table	\$350.00*
Corporate Sponsorship	\$500.00**

*Table sits 10 persons

**Sponsorship includes recognition at program, table of ten for dinner, and space for display

For additional information please access

www.ieee.org/phoenix

Please mail completed registration form along with your check, payable to "IEEE Phoenix Section" to:

Mr. Debendra Mallik
Treasurer, IEEE Phoenix Section
1210 N. Judd Place
Chandler, AZ 85226

Tel: (480) 554-5328

Fax: (480) 552-1291

Email: dmallik@ieee.org (preferred)

The deadline for receiving the registration fee is **Friday, February 1st, 2008**

Banquet Timings:

Registration / Social Hour with Cash Bar:	6:00 PM – 7:00 PM
Dinner / Keynote Presentation:	7:00 PM – 8:30 PM
Section Awards Program:	8:30 PM – 9:30 PM

Social Hour Hors D'Oeuvres (Tentative – May Change):

Tequila Jalapeno Poppers	Crab Stuffed Mushrooms
Teriyaki Beef Kabobs	Cheese and Cracker Tray
Vegetable Tray with Ranch Dip	

Cash Bar:

Sodas and Alcoholic beverages

Dinner Menu (Tentative – May Change):

- 1) Petite Filet Mignon and Chicken Piccata Combo Dinner
- 2) Chilean Sea Bass Dinner
- 3) Vegetable Wellington with Roasted Red Pepper Sauce

Dinner Menu also includes Field Green Salad with Ranch and Vinaigrette Dressings, Garlic Mashed Potatoes, Rolls and Butter, Fresh Vegetables, Ice Tea and Water

Dessert:

New York Cheesecake with Strawberry Sauce

Coffee, Decaffeinated Coffee and Tea are served with Dessert

Please limit Registration to two persons per form. attach multiple forms if necessary. Detach below and mail with check.

IEEE PHOENIX SECTION ANNUAL BANQUET – 2008 Registration

(Please complete all sections of the form by typing or printing in bold and capital letters)

Name:

Guest Name:

Address:

Telephone Number:

Email:

IEEE Member:

Yes

No

Student

Membership #

Dinner Choice (please select one per person)

- (1) ___ Petite Filet Mignon and Chicken Piccata Combo Dinner
- (2) ___ Chilean Sea Bass Dinner
- (3) ___ Vegetable Wellington with Roasted Red Pepper Sauce

**IEEE PHOENIX SECTION
ANNUAL BANQUET
Saturday, February 9th, 2008**

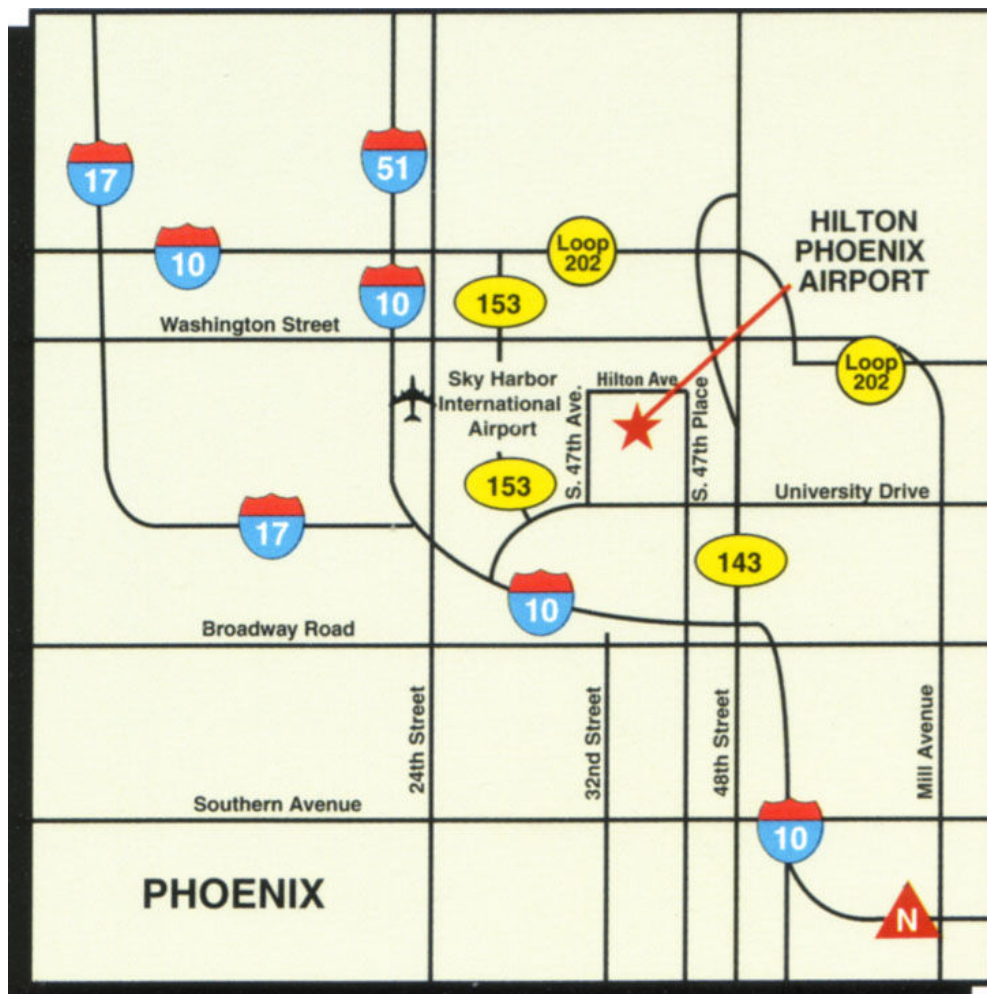
Venue Directions and Map



**2435 South 47th Street
Phoenix, Arizona 85034**

West of 143 Freeway and North of University Drive

**For Further Assistance Call
(480) 894-1600**



IEEE Phoenix Area Consultants Network February Meeting: Arizona Near Space Research

Date: Thursday, February 14th, 2008

Time: Feel free to come around 5:30 and socialize.
We take dinner orders around 6:30 PM
Meeting begins around 7:30 PM

Place: Denny's Restaurant
3315 N. Scottsdale Rd. (at Osborn)
Scottsdale, Arizona 85251

Abstract:

Our presentation will be by James Spindler and Steve Shott, who are members of Arizona Near Space Research, or "ANSR". ANSR is a non-profit organization whose goal is to get school children involved in science & technology, by exploring frontiers in amateur radio and high altitude balloons. See www.ansr.org for more information.

For more information, contact Vaughn Treude, vaughn@nakota-software.com, or see the IEEE PACN website, ieeepacn.com.

IEEE Computer Society - Phoenix Chapter

Speaker: Clark Jones

Date: 6:00 P.M., Wednesday, February 6, 2008

Location: DeVry University,

2149 West Dunlap Ave, Phoenix, AZ 85021 (1 mile east of I-17 on Dunlap, SE corner of 22nd Ave and Dunlap).

Networking will be in the Courtyard (6-7PM with light meal), presentation at 7PM. Free, everyone is welcome. Please tell others about this meeting.

Clark's Solar Energy System: A Report on a Real System

All computers newer than the Babbage Difference Engine have at least one common requirement – a power source. Come hear how Clark Jones has approached filling this need in an "environmentally friendly" fashion! The presentation will include:

- an evaluation of the economics, based upon his real-world experience with owning a utility-intertie photovoltaic (PV) system,
- a brief overview of the system,
- actual data gathered from the system and
- a comparison with some other options.

About the Speaker

Clark earned a B.S. in Computing and Information Sciences from the University of New Mexico in 1980. He worked for 23 years as an engineer in the semiconductor industry, mostly designing and writing highly-specialized compilers. He has also worked as a factory electronics technician and a broadcast engineer. He "retired" in 2003, and now spends his time on managing his investments in the oil and gas industry, and on his position in Mensa (the "high-IQ society") of Regional Vice Chairman for the Far West Region (meaning he's on the national board of directors of American Mensa).

Clark holds both commercial and Amateur Extra Class licenses from the FCC. He serves on the Board of Directors for a 501(c)(3) organization that, amongst other things, assists other charities with "behind the scenes" work for their fundraising events, helping to raise over \$2 million annually.

IEEE ANNOUNCEMENTS



Phoenix Chapter Picnic Meeting in the SouthEast Valley

Please see the website for more details

date: Saturday, March 1, 2008

time: 10:30 am until 3 pm

place: Palo Verde Pavilion, Desert Breeze Park, Chandler AZ

\$1 for in-advance* student purchase

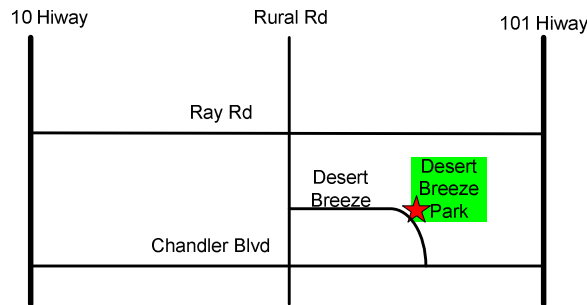
\$3 for in-advance* member and/or at-event student purchase

\$5 for in-advance* non-member, at-event member purchase

\$7 for at-event non-member purchase

* in-advance purchase means purchased at meeting or from an officer

Everyone is welcome. Please tell others about this meeting.



Would you like to be a speaker at this or future meetings? We are always looking for interesting speakers to cover computer related topics. Contact C.Vasquez-Carrera@computer.org for more information on becoming a speaker today.

For more information about this meeting, contact joy.shetler@computer.org

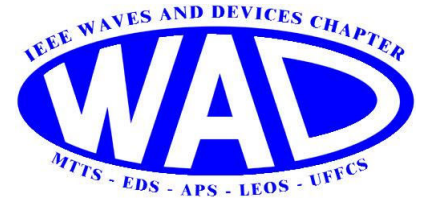
For more information about Past Meetings, see <http://www.ewh.ieee.org/r6/phoenix/compsociety>



IEEE

IEEE ANNOUNCEMENTS
INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
WAVES AND DEVICES
PHOENIX CHAPTER

February 14th, 2007 5:30PM
ASU Goldwater Ctr. Rm 487



Solutions to Driver Distraction from Mobile Devices

Robert "Mike" Gardner

Intelligent Systems Research Labs, Motorola Inc., Tempe, Arizona

Abstract

Consumers are demanding seamless experiences as they carry their mobile devices with their content and applications into moving vehicles. However, the potential exists for consumer electronics to distract drivers.

Can technology provide solutions? We think, "Yes".

Recent work in driving context aware devices that cooperate with vehicles may provide additional answers for the future. This talk will examine the key human interface issues and the use of machine intelligence, sensors, and cooperative communications to increase the positive use of in-vehicle electronics. A few fielded, prototype solutions will be show in video form

Biography

Mike Gardner is the Director of Motorola's Intelligent Systems Research Lab and a Fellow of Technical Staff. He is a leader of Motorola's Context Aware Research Program which is exploring cell phones that understand the lifestyle behaviors of their owners including how they work, recreate and travel. Mike's lab uses a rigorous, disciplined approach that collects subject data, analyzes that data, and creates algorithms and applications that recognizes the context of the phone and its user. These phones can recognize and even predict situations such as frequented locations, frequent travel routes, driving conditions, meeting situations, the orientation of the phone and how it is held, the walking or running pace, and many other contextual situations. The phone can then assist or adapt for the users benefit bringing greater utility and a more pleasing user experience.

Mike holds dozens patents as well as dozens of publications in this area. He has been an invited panelist or keynote speaker in this area in venues from ITS, CES, and IEEE in North America and Europe. Mike holds a Bachelors degree in Mechanical Engineering from NAU, a Masters in Electrical Engineering from ASU, and a Masters in Business Administration from RU.

Date: February 14th, 2008

Location: Arizona State University, Main Campus, Gold Water Center (GWC) Room 487

Enter the facility through the main (south) lobby and take the elevator to the fourth floor. Go north down the west hallway, the conference room is on the right. See <http://www.asu.edu/map/> for map.

Time: 5:30-6:30 PM Presentation

6:30 PM Discussion with Pizza Served



IEEE ANNOUNCEMENTS
INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
WAVES AND DEVICES
PHOENIX CHAPTER

February 28, 2008 MTTs Meeting
www.eas.asu.edu/~wadweb



Enhancing the Efficiency of Computer-Aided Analysis and Design through Physics-Based Model Complexity Reduction

Andreas Cangelaris

Associate Provost Fellow, University of Illinois at Urbana-Champaign

Abstract

State-of-the-art electromagnetic (EM) field solvers and CAD tools are empowering high-frequency electronics designers with unprecedented capability and expediency in EM device conceptualization, design, optimization and prototyping. This is particularly true at the component and (small) sub-system level, where modeling complexity is manageable enough for state-of-the-art EM CAD tools to be used with confidence and solution efficiency consistent with the stringent time-to-market requirements. Yet, as functionality integration continues to escalate and product form factor continues to shrink, designers demand system-level EM CAD support of performance commensurate to that at the component level. This talk addresses this challenge and highlights near-term solutions, some of which are expected to enable the next generation of EM CAD technology.

Biography



Andreas Cangelaris is M. E. Van Valkenburg Professor in the Department of Electrical and Computer Engineering, at the University of Illinois, Urbana-Champaign. Professor Cangelaris received his Diploma in Electrical Engineering from the Aristotle University of Thessaloniki, Greece, in 1981, and the MS and PhD degrees in Electrical Engineering from the University of California, Berkeley, in 1983 and 1985. Professor Cangelaris has spent over twenty years in academia, first at the University of Arizona (1987-1997) and then at the University of Illinois (1997 – to date). Professor Cangelaris' current teaching and research interests include computational electromagnetics; CAD methodologies and tools for signal and power distribution network design in high-speed/high-frequency electronics; EMI/EMC modeling and simulation; and techniques for MEMS CAD. Professor Cangelaris is a Fellow of IEEE and serves as Editor of the IEEE Press Series on Electromagnetic Field Theory. In

2005 he received the Alexander von Humboldt Research Award from Germany for his contributions to engineering applications of electromagnetic field theory.

Date: February 28, 2008

Location: Arizona State University, Main Campus, Schwada Classroom Bldg Room (SCOB) Rm 150

Visitors park in parking structure at SW corner Terrance and Rural, enter off Terrance

See <http://www.asu.edu/map/> for map.

Time: 5:30-6:30 PM *Presentation* 6:30 PM *Discussion with Pizza Served*

For more information, please call Chuck Weitzel (Chapter Chair) at (480) 413-5906.



GENSIPS'2008



IEEE International Workshop on Genomic Signal Processing and Statistics

Phoenix, Arizona

June 8–10, 2008

<http://gsplab.tamu.edu/gensips2008>

Recent advances in genomic studies have stimulated synergistic research in many cross-disciplinary areas. Genomic data, especially the recent large-scale microarray gene expression data, present enormous challenges for signal processing and statistics, which has led to the development of the new field of Genomic Signal Processing (GSP). This workshop is the sixth in a series of international scientific meetings devoted to the area of GSP and its applications in biology and medicine. The workshop addresses the emerging need for demonstrating to the signal processing community the potential for using signal-processing and statistical tools to uncover complex biological phenomena. The scientific program will include invited talks, tutorials, contributed papers and poster presentations. Participants will have the opportunity to be exposed to the most recent developments in the field and meet colleagues from all around the world.

AREAS OF INTEREST

Topics of interest to the conference include, but are not limited to:

- Signal processing and statistical approaches for functional genomics problems
- Statistical inference of biological networks from experimental data
- Pattern recognition methods for functional genomics
- Control theory and systems theory techniques for systems biology
- Models for cellular metabolism and intercellular signaling
- Modeling and simulation of biological regulatory networks
- Novel architectures and implementation methods for large-scale functional genomics
- High-throughput hardware and software approaches to genome-scale network modeling
- Integration of heterogeneous data
- Microarray image and data analysis
- Signal processing methods in sequence analysis
- Computational methods for modeling and simulation of biological regulatory networks

VENUE

GENSIPS'2008 will be held at the Embassy Suites Biltmore, in Phoenix, Arizona, which is located in the Biltmore area of Phoenix, home of fine dining, shopping, and other attractions, all within walking distance of the hotel.

IEEE ANNOUNCEMENTS

ORGANIZING COMMITTEE

General Chair: **Aniruddha Datta**, Texas A&M University, College Station
Technical Program Chairs: **Paola Sebastiani**, Boston University
Gustavo Stolovitzky, IBM T.J. Watson Center
Ciprian Doru Giurcaneanu, Tampere University of Technology
Tutorial Chair: **Ilya Shmulevich**, Institute of Systems Biology
Plenary Speaker Chair: **Ioan Tabus**, Tampere University of Technology
Special Session Chair: **Tewfik Ahmed**, University of Minnesota
Finance Chair: **Ranadip Pal**, Texas Tech University
Publication Chair: **Yufei Huang**, University of Texas at San Antonio
Local Arrangement and Registration: **Jianping Hua**, Translational Genomics Research Institute
Publicity Chairs: **Ulisses Braga-Neto**, Texas A&M University
Seungchan Kim, Translational Genomics Research Institute and Arizona State University

PROGRAM COMMITTEE

Tatsuya Akutsu, Kyoto University
Gil Alterovitz, Massachusetts Institute of Technology
Junior Barrera, University of São Paulo
Michael Bittner, Translational Genomics Research Institute
Xiaodong Cai, University of Miami
Yidong Chen, National Cancer Institute, NCI/NIH
Paul Dan Cristea, University of Bucharest, Romania
Nevenka Dimitrova, Philips Research
Simon Godsill, University of Cambridge, UK
John Goutsias, The Johns Hopkins University
Arjang Hassibi, University of Texas at Austin
Robert S. H. Istepanian, Kingston University, UK
Ivan Ivanov, Texas A&M University
Stephen Marshall, University of Strathclyde, UK
Lijun Qian, Prairie View A&M University
Gail Rosen, Drexel University
Dan Schonfeld, University of Chicago
Chao Sima, Translational Genomics Research Institute
Anne Stomp, North Carolina State University
Qi Tian, University of Texas at San Antonio
Xiadong Wang, Columbia University
Z. Jane Wang, University of British Columbia
Stephen Wong, The Methodist Hospital Research Institute
Rui Yamaguchi, University of Tokyo
Byung-Jun Yoon, Texas A&M University
Xiaobo Zhou, Harvard Medical School

Engineering and the Environment Conference and Exhibition

For additional information, contact Michael Andrews, m.andrews@ieee.org, (602) 368-6013

Volunteers are needed to serve on the Organizing and Technical Committees for the first Engineering and the Environment Conference and Exhibition planned for March 2009.

The **ENGINEERING AND THE ENVIRONMENT CONFERENCE AND EXHIBITION** offers engineers and technical professionals the opportunity to:

- Share experience, concepts, innovations and technologies that address various environmental issues
- Demonstrate constructive concern from a global technical community
- Promote public awareness of engineering solutions to environmental issues
- Involve and inspire students, both university level and K-12, by including them in discussions, demonstrations and exposure to emerging technologies
- Provide a public event that will enhance the public image of the engineer and technical professional
- The event that is politically supportive/neutral and represents an untapped, unbiased knowledge base

The **ENGINEERING AND THE ENVIRONMENT CONFERENCE AND EXHIBITION** is designed to provide an opportunity for the engineering and technical community to address environmental issues of concern by the engineering community and design considerations that address sustainability. The Exhibition will provide an opportunity for organizations to spotlight emerging technologies and create innovative solutions for a number of environmental concerns.

Presentations can be a combination of technical track presentations, forums and tutorials. The **technical program** would be organized and managed similarly to other IEEE technical conferences with Track/Program Chairs, formal call for papers and refereed papers. The **forum** will be hosted by the conference with speakers invited based on a specific area of expertise or field of interest. **Tutorials** would be classroom-based presentations that provide conference attendees and the general public with implementable solutions to specific problems.

Technical Tracks

- **Energy**
 - Energy conservation, building materials, lighting systems and controls, low voltage, starters, thin film, etc.
 - Renewable power generation, biomass, building materials, fuel cells, geothermal, hydrogen, nanomaterials and nanocells, nuclear, solar, wind, etc.
- **Green Materials**
 - Standards
 - Consumer and Industrial Electronics
 - Building and construction materials
 - Integrated elements
 - Infrastructure elements

IEEE ANNOUNCEMENTS

- **Impact of Emerging Nations**
 - Use of natural resources
 - Design of new manufacturing and distribution facilities
 - Pollution control systems
 - Regulations and self-regulated development
- **Nanotechnology**
 - Nanotoxicology
 - Nanopollution
 - Nanosensors and control systems
- **Manufacturing**
 - Consumer electronics
 - Emerging economies
 - New manufacturing and distribution facilities, processes and systems
- **Sustainability**
 - Green engineering (process, building and infrastructure improvements)
 - Industrial Ecology (improved operating efficiency and waste reduction)
 - Ecological Engineering (systematic resource restoration)
 - Earth Systems Engineering (mitigation systems)
 - Energy systems
 - Water use, reclamation and reuse
 - Buildings
 - Transportation systems

Forum:

In addition to the technical tracks identified, the conference could host a forum(s) that specifically address:

- A specific environmental issue
- National initiatives
- Funded research initiatives
- Transferable or repeatable approaches in manufacturing that positively impact the environment
- Award winning systems

IEEE ANNOUNCEMENTS

Attention IEEE Students and Advisors;

It is time to consider the "2008 IEEE Student Paper Contest," and the 2008 IEEE Scholarships Applications.

Paper Contest:

At the Phoenix Executive Committee Meeting on October 2, 2007, we voted to raise the awards for the student paper contest.

The cash awards were raised as shown in the forms to:

1st place: \$500

2nd place: \$300

3rd place: \$100

The due dates established for "The Student Paper Contest" are:

Written Papers due: March 1, 2008

Oral Presentations: March 15, 2008

Scholarships:

There are two \$1000 scholarships available.

The due dates for the IEEE Phoenix Section Scholarships are:

Applications due: December 22, 2007

Selection and announcement: January 2008

Regards;

Jim Drye

IEEE Phoenix Section

Student Activities Coordinator



IEEE PHOENIX SECTION SCHOLARSHIPS

Applications Due: December 22, 2007

Awardees Announced: January 2008

Institute of Electrical & Electronics Engineers

IEEE Student Member Scholarships

- For full-time undergraduates who are members of IEEE: approved majors are Electrical/Electronic Engineering, Computer Systems Engineering, Electrical Engineering Technology, Computer Engineering Technology, or Computer Science
- Must attend a university in the Phoenix Section during 2006-07 (*i.e.*, ASU, ASU Polytechnic, DeVry, Embry-Riddle, or NAU)

Scholarship Application Requirement

- Application form (attached) with general information and qualifications including:
 - financial aid statement, and
 - one-page personal statement of attainments, interests and goals
- Official transcripts of all college work
- Recommendation letters (optional, but helpful to the selection committee)

For any further Information Please Contact:

Jim Drye
jdrye@ieee.org
(480) 650-8826

Send Completed Application Materials to:

Jim Drye
Student Activities Chair
705 E. Bates St.
Mesa, AZ 85203

IEEE ANNOUNCEMENTS



IEEE PHOENIX SECTION
SCHOLARSHIP APPLICATION
(Due: December 22, 2006)

Applicant IEEE Member No. _____

Name _____
Last/Family , First , Middle

Home Address _____
Number Street Apt
_____ City State Zip Code

Telephone No. () _____ E-mail _____

Social Security No. _____ Date of Birth _____
Month/Day/Year

Are you an Arizona resident? Yes No

Present School _____ GPA (and scale) _____

Class (Fr/So/Jr/Sr) _____ Academic Probation/
Suspension Yes No

Name of Instructor familiar with your qualifications _____ Her/His Telephone _____

College Attending Next Year _____ Expected Graduation Date _____

College Major _____ Specialty within Major, if any _____

*Please complete pages 2 and 3 (Financial Aid Statement and Personal Statement),
And Attach Official Transcripts from Present School/College.*

IEEE ANNOUNCEMENTS

IEEE PHOENIX SECTION SCHOLARSHIP
FINANCIAL AID STATEMENT

Name _____

Marital Status: Married _____ Single _____

Can anyone claim you as a dependent? Yes _____ No _____

Number of dependents you are able to claim _____

Who sponsors your education? Yourself _____ Other _____ (please specify) _____

Projected College Costs and Financial Resources (for the 2006-2007 School year)

Projected Expenses

Tuition and Fees:	\$ _____
Books and Supplies:	\$ _____
Transportation (Car/Bus/Insurance)	\$ _____
Room & Board (Dorm/Apt/Food/Utilities/Phone)	\$ _____
Personal (Clothes/Insurance/Recreation)	\$ _____
Total Expenses:	\$ _____

Projected Financial Resources

Education Loans	\$ _____
Government Grants	\$ _____
Federal Benefits (GI Bill/Social Security/etc)	\$ _____
Scholarships	\$ _____
Parent and/or Spouse Support	\$ _____
Employment (your job income)	\$ _____
Total Resources:	\$ _____

I certify that the information in this scholarship application is true to the best of my knowledge.

Signature

Date

IEEE ANNOUNCEMENTS

**IEEE PHOENIX SECTION SCHOLARSHIP
PERSONAL STATEMENT**

Name _____

Please provide a one-page statement summarizing your interests, academic accomplishments, school & athletic activities, community service, education and career goals, and employment history (position, company, dates).

IEEE ANNOUNCEMENTS

IEEE Phoenix Section Student Paper Contest 2008

The IEEE Student Prize Paper Contest offers the undergraduate IEEE Student member opportunities to exercise and improve both written and verbal communication skills. Throughout an engineer's career, (s)he will be constantly called upon to communicate ideas to others. Researching, writing, and presenting a paper provides a student with invaluable early experience in expressing ideas related to engineering. Since the paper contest primary function is to improve the engineering student's communicative skills, no student should be discouraged from entering the contest due to a false requirement of technical sophistication.

This undergraduate student paper contest consists of a written paper and an oral presentation. The written paper should be in the IEEE region 6 standard, which is available at <http://www.ewh.ieee.org/reg/6/MemberStudentActivities/IEEERegionalStudentPaperContestGuidelines.doc> . (note: I have downloaded a copy and it is attached). Briefly, the type-written papers are 15 pages maximum, double-spaced with 12 pt font. The written paper, as either an MS Word or an Acrobat pdf file, should be emailed to jdrye@ieee.org by 6 p.m. on **March 01, 2008**.

The oral presentations are 15 minutes plus a 5-minute question & answer period. The oral portion of the contest to be held the morning of Saturday **March 15, 2008**, at the ASU Tempe campus in the ASU Memorial starting at 8 a.m. A computer with projector will be provided for the contestants to use, since PowerPoint slides are the recommended approach. The best place to park that day should be the visitor section of Parking Structure 1 which is located near the intersection of Apache Blvd. and Normal St., and which is a short walk to the south of the Memorial Union (see <http://www.asu.edu/map/>).

The local cash awards for the paper contest winners are (1) First Place – **\$500**, (2) Second Place – **\$300**, and (3) Third Place – \$100. The five judges are IEEE members from local industries.

The top entrant from each Local Student Branch (ASU Main, ASU Polytechnic, DeVry, Embry-Riddle, and NAU) is eligible to present their paper to the IEEE Region 6 Southwest Area contest to be held April 2008 in “Tucson. AZ”.

If you have any questions, please contact:

Jim Drye
Student Activities Chair
Phoenix Section

Voice: (480) 650-8826
Email: jdrye@ieee.org

IEEE Regional Student Paper Contest Guidelines

Purpose

The IEEE Student Prize Paper Contest offers the undergraduate IEEE Student member opportunities to exercise and improve both written and verbal communication skills. Throughout an engineer's career, he will be constantly called upon to communicate ideas to others. Researching, writing, and presenting a paper provides a Student with invaluable early experience in expressing ideas related to engineering. Since the paper contest primary function is to improve the engineering student's communicative skills, no Student should be discouraged from entering the contest due to a false requirement of technical sophistication.

A. Eligibility

1. The entrant must be an undergraduate student at a school in the Region at which there is an IEEE Student Branch at the time of entry and presentation at the Branch contest.
2. A Student must complete and submit an application for membership in IEEE prior to entry in the Branch Contest.
3. An entrant may collaborate writing a paper with additional students, all whom meet the above criteria.

B. Number of Entries

1. There shall be no limit of entries in the local Branch contest. If there is only one entry, the Counselor may declare the author submitting the paper the Branch winner.
2. Each Branch normally enters the first place winning paper in the next level contest.
3. No paper may be entered in the Area or Regional contest without the prior approval and certification of the Branch Counselor.

C. Prizes and Travel Expenses

1. The Institute Life Member Fund will provide the funds for the prize money.
2. Additional prize money may be made available at the option of the Chairman of each contest.
3. The schools represented by the winning Regional papers may receive appropriate recognition from their Region.
4. Co-authors shall share equally in the allocation of cash awards.
5. Regional Student Activities Committee budget shall support the Area and Regional contest expenses, including travel, unless other funds are available.

D. Subject Matter

1. Papers should cover technical, engineering, management, or societal aspects of subjects reasonably within or related to the areas with which the author is familiar, either from courses, hobbies, summer work, or other similar experiences.
2. The work need not be original in content since the primary function of the Student prize paper contest is to improve the student's communication skills. The work should, however, be original in treatment and concise in coverage of the author's contribution to the subject.

E. Written Preparation

1. All papers must be typewritten, double spaced on one side only of eight and one-half by eleven inch paper. An equation or symbol that cannot be typed may be written in.
2. The pages of the paper must be numbered consecutively. The Introduction, Body, Conclusion, Tables, and Diagrams may not exceed 15 pages while the above sections with the Appendices may not exceed 20 pages.
3. In general, the contents of a Student prize paper shall be organized as follows:

IEEE ANNOUNCEMENTS

- (1) Removable fly-leaf page: Since the judges must handle the papers without knowledge of the identity of the author or his school, it is required that the paper itself show no identification other than the title. The title, name of the author, school and Branch Counselor's name, author's IEEE member number, and his current address must be shown on a fly-leaf which can be removed.
- (2) Title page: On the title page, only the title of the paper should appear. The title should consist of the minimum number of key words necessary to portray accurately the contents of the paper. Reader interest is stimulated by a well-chosen title. The author's name should **NOT** appear on the title page, nor should any other persons or schools.
- (3) Table of Contents: The table of contents should consist of a list of the parts of the paper and the page numbers, in order in which they occur.
- (4) Abstract: The abstract should not describe the paper, but should give, in brief, the essential facts of its contents; for example, a brief of the problem or objective and a concise summary of the results or conclusion, touching upon methods or other details only if they are unique or if they are of some particular significance. The abstract should be no longer than 100 words.
- (5) Introduction: The introductions should lead to the development of the subject so that the reader may obtain a clear understanding of the significance of the paper or article prepared. This can often be done by briefly giving the state of the art as background and then by bringing out the added advantages of the method of approach and emphasizing the importance of the results or conclusions.
- (6) Body: To assist the judges in maintaining objectivity, all mention of the author's name and school should be restricted to a single introductory page. Thus, no mention of the author's name or school should be made in the article. Any references to the author's school should read "the university" without giving the actual name. The main argument of the subject is carried out in the body of the paper, complete with supporting data. The argument should proceed in a logical sequence according to a prepared outline. The writing should be in the third person. Support data and results can be presented most effectively as curves, charts, or tables. Standard graphical symbols and abbreviations should be used on all drawings. (Ref. Graphic Symbols for Electrical and Electronic Diagrams, IEEE STD 315.) Well known abbreviations may be used in the text but should be defined where used the first time followed by the abbreviation in parentheses. Generally the use of abbreviations should be confined to tables and illustrations. Illustrations and tables should supplement, not duplicate, text materials; likewise, they should complement, not duplicate each other.
- (7) Conclusion: The conclusion are often considered the most important part of a paper. They should be stated concisely in a separate section at the end of the paper. If there are three or more conclusions, better emphasis can be obtained by numbering each conclusion and setting it off in a separate paragraph.
- (8) Tables: Generally, each table should be typed on a separate sheet and numbered consecutively using Roman numerals: Table I, Table II. Small tabulations or listings may be made in the text where necessary for continuity. Each table should be titled by giving the brief description as a heading following the table number at the top. Ditto marks should not be used in tables, but brackets may be used to group information on several lines.
- (9) Figures: Figures should be numbered consecutively using Arabic numerals: Figure 1; Figure 2, etc. Three types of figures may be used: photographs, oscillogram, and line drawings. The reading material on illustrations should be kept to a minimum. In short, the reading material should be included in the captions. Portions of the illustrations may be identified by letters and explained in the captions. Whenever feasible, several curves should be combined on the same coordinates. Their identifying letters or numbers should be in clear spaces between cross section lines. Readers generally prefer having the figures distributed through the article, although it is also permissible to bind them together at the end.

IEEE ANNOUNCEMENTS

(10) Appendices: Detailed mathematical proofs, development of equations and examples which are subordinate to the main argument in the body of the paper, but not essential to following the argument, should be treated in the appendices. Main equations as they are developed should be numbered consecutively, with the number in the right margin. The equations, figures, and tables in the Appendices should be numbered consecutively following the numbers used for the equations, figures, and tables in the text (such as, if table IV were last in the text, table V would be first in the Appendices.)

(11) References: To enable the reader to consult important works used by the author incidental to the preparation of his manuscript and other related literature which might be helpful, a suitable reference list should be appended. References should be numbered consecutively and should follow the form shown below:

For a periodical: R.N. Hall, Power Rectifiers and transformers, Proc. IRE, Vol. 40, pp. 1515-1518, November 1952.

For a book: W.A. Edison, Vacuum Tube Oscillators, John Wiley and Sons, Inc., New York, New York, pp. 170-171, 1948.

For an article: B. Lawrence, B.H. Weil, and M.H. Graham, Making online search available in a industrial research environment, Journal of the American Society for Information Science, pp. 364-369, Nov-Dec. 1974.

4. The Contest Chairman of each contest shall determine the number of copies of each paper that shall be submitted for entry in the contest.

5. Regional winners will receive further information from the Manager, Student Services at IEEE Headquarters concerning the required format of papers for publication in IEEE STUDENT PAPERS.

F. Oral Presentation

1. Fifteen (15) minutes shall be allotted for the oral presentation and five (5) minutes for questions from the audience.

2. The paper contest chairman shall arrange a timing system, with the following characteristics:

(1) A Signal will be given at the beginning of the oral presentation.

(2) A warning signal will be given at the end of thirteen (13) minutes.

(3) A stop signal will be given at the end of fifteen (15) minutes.

(4) The contest should cease talking when the stop signal is given. The contest judges will assess penalties for running overtime.

(5) The contestant will be stopped by the judges at the end of twenty (20) minutes if he continues past the stop signal.

(6) In addition to the fifteen and five minutes periods, the judges shall be given up to ten (10) minutes to complete their evaluations between presentations.

3. Individuals asking questions during the discussion period shall state their name and affiliation. If the audience does not present any questions, the judges should do so. Questions will be stopped at the end of five (5) minutes.

4. Demonstration or display apparatus may **not** be employed as a part of the contest presentation. Visual aids such as slides, placards, charts, view graph pictures and motion picture films may be used.

5. Each contestant is responsible for making arrangements with the paper contest chairman for audio-visual equipment if needed.

G. Judging

1. Papers will be evaluated and judged on the basis of twenty equally weighted judging criteria. Evaluation and judging is based on 55 percent given to the written presentation and 45 percent weight given to the oral presentation. (Note that 65 percent of the judging criteria is related to the

IEEE ANNOUNCEMENTS

student=s written and verbal skills, emphasizing that the paper contest=s primary function is to improve an engineering student=s communication abilities.)

Judging Criteria

Written Presentation Evaluation

Form - 35%

- 1) Concise, informative abstract. 1 2 3 4 5 6 7 8 9 10
- 2) Adequacy of introduction. 1 2 3 4 5 6 7 8 9 10
- 3) Logical development and analytical treatment in the body. 1 2 3 4 5 6 7 8 9 10
- 4) Adequacy of conclusion. 1 2 3 4 5 6 7 8 9 10
- 5) Compliance with paper contest guidelines on format. 1 2 3 4 5 6 7 8 9 10
- 6) Clarity and direction in exposition. 1 2 3 4 5 6 7 8 9 10
- 7) Grammar, spelling, style, and choice of words. 1 2 3 4 5 6 7 8 9 10

Score _____

Subject Matter - 20%

- 8) Originality of ideas, experimental procedures, processes, results, or conclusions due primarily to this author. 1 2 3 4 5 6 7 8 9 10
- 9) Originality of analysis, interpretation, restatement of inference based upon the work of others. (If the paper and its contents are entirely the work of the author, enter #8 score into #9.) 1 2 3 4 5 6 7 8 9 10
- 10) Quality and level of technical, social, or management content. 1 2 3 4 5 6 7 8 9 10
- 11) Factual and technical accuracy. 1 2 3 4 5 6 7 8 9 10

Written Score _____

Judging Criteria

Oral Presentation Evaluation

Form - 30%

- 12) Organization--has introduction body and conclusions with transitions between each. 1 2 3 4 5 6 7 8 9 10
- 13) Logical development. 1 2 3 4 5 6 7 8 9 10
- 14) Poise, eye contact, and platform manners. 1 2 3 4 5 6 7 8 9 10
- 15) Grammar, fluency, and choice of words. 1 2 3 4 5 6 7 8 9 10
- 16) Clarity and directness in exposition. 1 2 3 4 5 6 7 8 9 10
- 17) Use of graphic aids. 1 2 3 4 5 6 7 8 9 10

Score _____

Subject Matter - 15%

IEEE ANNOUNCEMENTS

- 18) Apparent technical and factual accuracy and grasp of the subject. 1 2 3 4 5 6 7 8 9 10
- 19) Use of examples and analogies. 1 2 3 4 5 6 7 8 9 10
- 20) Discussion--judges should be prepared to stimulate discussion. 1 2 3 4 5 6 7 8 9 10

Score _____

Written Score _____

Total Oral and Written Score _____

3. Each of the twenty categories will be scored between 1 and 10. Accordingly the following guidelines should be helpful:

- 1) Maybe some one should suggest that he change his major.
- 2) Did he even think about his point?
- 3) Two more tries might have helped.
- 4) Needs some polish to smooth the rough spots.
- 5) Not bad.
- 6) What is expected of someone at this level.
- 7) Very Smooth.
- 8) The individual must have put special emphasis on the area.
- 9) So logical and correct that the words seemed to form in your mind as the contestant spoke or wrote them.
- 10) What Moses felt on Mt. Sinai.

4. There shall be five (5) to seven (7) judges. The use of the same judges for both the Written and Oral presentations is optional but encouraged.

5. The judges shall be selected to represent a cross section of various disciplines in electrical, electronics and related fields of engineering. The Section and Regional SAC should be called on to assist in the selection of judges at all levels of the paper contest.

6. The judges should have a record of experience in written and oral communication of ideas

IEEE ANNOUNCEMENTS

IEEE Mentoring Connection

IEEE is offering its members the opportunity to participate in an online program which will facilitate the matching of IEEE members for the purpose of establishing a mentoring partnership. By volunteering as a mentor, individuals use their career and life experiences to help other IEEE members in their professional development. I believe this program can be a great tool to provide our newest members of our profession guidance in their careers and provide experienced members a chance to hear first hand from the newly graduated about the latest training the next generation is receiving. This is a program for higher level members and is provided to help ease the transition out of school and into a career.

As a mentee, you lead your partnership by selecting your mentoring partner from among those who have volunteered to serve in this capacity. I ask that you review the time and effort commitment to the program to ensure a successful mentoring partnership. Participation in the program is voluntary and open to all IEEE members above the grade of Student Member.

If you are interested, please go to <http://www.ieee.org/mentoring> for information on the roles and responsibilities of each mentoring partner. I encourage you to take advantage of the IEEE network of technical professionals or offer your expertise and sign up for the online mentoring program today.

Who can be an IEEE Mentor?

IEEE higher-grade members (above Student Member grade) who are, but not limited to:

- Willing to give time and effort to the mentoring partnership (we suggest minimum of two hours per month)
- Able to communicate effectively with others
- Willing to share some career successes and failures
- Individuals who may be or have been executives, consultants, or in middle or upper management, or in research
- Individuals who may be or have been educators, entrepreneurs, or self-employed
- Individuals who may be or have been proven leaders offering inspiration and insight
- Individuals who may be or have been IEEE officers or volunteers
- Willing to review an orientation session to learn guidelines, tools of program and the mentee and mentor's role and responsibilities

Who can be an IEEE Mentee?

IEEE higher-grade members (above Student Member grade) who are, but not limited to:

- New professionals in their first or second job, or considering entering graduate programs
- Recent graduates entering the professional workforce for the first time
- Professional making a career move or career change
- Passionate for learning
- Willing to give time and effort to the mentoring partnership (we suggest minimum of two hours per month)
- Willing to identify and clarify their developmental goals
- Interested in learning from another professional "who has been there"
- Willing to participate in mentee orientation session to learn guidelines, and tools of program and their role and responsibilities as a mentee

This program deserves your consideration and doesn't require a large amount of time on your part. It can provide of great assistance to the next generation of engineers.

Russ Kinner
Membership Chair, Phoenix Section

RE-SEED

Retirees Enhancing Science Education through Experiments & Demonstrations

Overview

RE-SEED (Retirees Enhancing Science Education through Experiments and Demonstrations) is a Northeastern University program that prepares engineers, scientists, and other individuals with science backgrounds to work as volunteers, providing in-classroom support to upper elementary and middle school science teachers with teaching the physical sciences.

After completing a comprehensive free training program, participants volunteer in middle school classrooms on the average once a week for at least one year. RE-SEED began in 1991 with six volunteers. To date close to 500 RE-SEED volunteers have worked in schools in about 100 communities throughout the country offering about 500,000 hours of their time.

Nationally, 75 percent of 7th and 8th grade students are taught physical science by teachers who do not have a major or a minor in the subject (The National Science Board, Science and Engineering Indicators 2000). RE-SEED volunteers possess talent and expertise that complement those of science teachers. They bring with them a wealth of knowledge and experience that allows them to make science interesting and relevant to everyday situations.

RE-SEED volunteers work closely with the host science teachers to help them enrich and implement their school curriculum. Overall the volunteers become involved members of their schools' and even their districts' teaching team, sometimes taking part in curriculum adoption decisions.

Please contact us by email at reseed@neu.edu or phone 888-742-2424; Shelia Kirsch at Sheila.Kirsch@asu.edu and / or Deirdre Weedon, d.weedon@neu.edu. if you are interested in learning more about these training programs.