#### IEEE Central Texas Section

# ANALOG NEWSLETTER

Volume 51-3 March 2007

Newsletter of the <u>Central</u>
<u>Texas Section</u> of the
Institute of Electrical and
Electronic Engineers,
Inc.

Published monthly (Deadline for inclusion is the 25th day of the previous month). Dawn Roberson, Editor, (robersondj@ieee.org). Have a question or comment? Contact us.

Central Texas Section Webpage

Central Texas Section calendar

#### **CONTENTS**

#### 1. Section Activities

- The Chairman's Column
- Chapter News
- Continuing Education
- Student Branches
- <u>Calls for volunteers</u> Engineering in the (K-12) Classroom, State Science Fair Judges and Potentials Call for Papers

#### 2. Chapter Activities

- Multiple Chapters
- Joint Circuits and Systems/Solid-State Circuits
- Computer Society Austin
- Computer Society San Antonio
- Consultants Network
- Electromagnetic Compatibility Society
- Electron Devices Society
- Engineering in Medicine and Biology
- Engineering Management
- Graduates of the Last Decade
- Laser and Electro Optics Society

# 4. Local Conferences

14th Intl IEEE Test
Synthesis Workshop
(ITSW 2007) IEEE
Computer Society's Test
Technology Technical
Council (TTTC) and will be
held March 5-7 at the El
Tropicana Riverwalk Hotel
in San Antonio March 5-7.
Conference website.

2007 International Workshop on System Level Interconnect Prediction (SLIP) will be held at the Lakeway Resort and Spa in Austin on 17-18 March 2007.

http://www.sliponline.org/

ACM Intl Symposium on Physical Design (ISPD) on March 18-21 at Dolce Lakeway Resort and Spa in Austin. Conference website

IEEE Intl Conference on Radio Frequency Identification Technologies (RFID) 2007. March 26-28 2007 in Grapevine, TX.

- Power Engineering Society
- Product Safety Engineering Society
- Joint Signal Processing/Communications Society
- Women in Engineering
- Editor's Notes

#### 3. IEEE Info

- Preview Online IEEE-backed, engineering-based reality PBS TV Show, 'Design Squad'
- IEEE Foundation Seeking 2007 Grant Applications
- The Institute seeks Section, Region and Society News
- IEEE-USA Offers Resources to Assist Tech-Based Entrepreneurs
- Fourth Annual IEEE-USA Career Fly-In
- Ready to Learn With Online Tutorials
- IEEE Teams with IBM to Launch TRYENGINEERING.ORG
- Is Digital Copyright Legislation Going Too Far?
- Member Portal

#### 4. Local Conferences

- 14th Intl Test Synthesis Workshop (ITSW 2007)
- 2007 Intl Workshop on System Level Interconnect Prediction (SLIP)
- ACM Intl Symposium on Physical Design (ISPD)
- IEEE Intl Conference on RFID 2007
- 2007 IEEE International Conference on System of Systems Engineering (SoSE)
- 2007 IEEE International Conference on IC Design & Technology (ICICDT)
- IEEE Int'l Symposium on Consumer Electronics (ISCE 2007)
- 2007 IEEE International Engineering Management Conference EM 2007 (IEMC)
- IEEE Intl Conference on Image Processing 2007 (ICIP)

#### 5. Presentations of Interest

• UT Distinguished Lecture Series on Software Engineering

Conference website: www.ieee-rfid.org/2007

2007 IEEE International
Conference on System of
Systems Engineering
(SoSE) will be held April
16-18, 2007 in the Holiday
Inn Riverwalk in San
Antonio, TX.

http://engineering.utsa.edu/2007ieeesose

2007 IEEE International Conference on IC Design & Technology (ICICDT) will be held 30 May - 1 Jun in Austin.

http://www.icicdt.org/

**IEEE Int'l Symposium on Consumer Electronics**(**ISCE 2007**) will be held
June 20-23 in Dallas at the
Westin DFW Airport.
Abstracts for paper
submissions are due Feb 2.
Conference website.

2007 IEEE International
Engineering Management
Conference - EM 2007
(IEMC) will be held 29 Jul 1 Aug at the Hyatt Lost
Pines Resort and Spa in Lost
Pines.
http://www.iemc07.org

#### 1. Section Activities

#### **^**Chairman's Column

The Central Texas Section has kicked off 2007 and is shifting into high gear. Lots of great plans were discussed at the Feb 3 planning meeting. The meeting was well attended and presentations should be up on the Section website any day now.

As I am writing this, Engineer's Week is coming to a close in San Antonio. The Austin banquet is on Mar. 3. There were a number of events in San Antonio and Austin, and I hope that you had the opportunity to participate in a way that has meaning for you.

There continue to be opportunities within the Section and Chapters for members who desire to enhance their careers by working and networking with colleagues. Our call for volunteers continues to attract dedicated members. Dr. Jason Polendo has volunteered to head up GOLD. Please welcome him.

Sherry Gillespie is working with the Austin Chamber of Commerce to recognize the contributions of Engineers to Central Texas. The Chamber will hold the event on May 1. Details will be posted on the Web. Dawn Roberson is working in parallel to energize the San Antonio Chamber.

There are a number of workshops, conferences and symposia in our area in March. Please take advantage of these opportunities. They are described in the Analog and posted on the web.

Be sure to consult the Central Texas Section Website, <a href="http://www.ewh.ieee.org/r5/central\_texas/">http://www.ewh.ieee.org/r5/central\_texas/</a> for meetings, conference dates and news.

Thanks to all who volunteer their time and skill to the Central Texas Section of IEEE. Please let me know how I can help you participate.

Clif Denny Chairman Central Texas Section

c.denny@ieee.org Senior Member IEEE **IEEE Intl Conference on Image Processing 2007 (ICIP)** will be held Sept 16-19 in San Antonio. The Call for Papers can be found on the conference website.

#### **Back to Content**

# 5. Presentations of Interest

UT Distinguished Lecture Series in Software Engineering. "Teaching Modern Software Engineering", presented by Watts Humphrey, Software Engineering Institute, Carnegie Mellon U on March 27, 4-5p at the Avaya Auditorium in the ACES Building on the UT Main Campus.

If you're interested in more **presentations in Austin,** the Austin Chamber has started a newsletter, called "TechBytes from the Human Capital". Free signup at www.austinhumancapital.com.

Central Lexas Section Chair

## **^€Chapter News**

## **AContinuing Education**

**NEED CEUs?** The University of Texas at Austin offers a wide array of continuing engineering education opportunities geared towards Texas engineers. All of the training awards continuing education units (CEUs) which Texas PEs are now required to submit for their annual renewal. We event boast CEU Conferences where you can get all required 1.5 CEUs – including 1 hour of engineering ethics – in just a few days! Visit <a href="https://www.utclee.org">www.utclee.org</a> for more information.

Upcoming opportunities include:

Software Project Management Certificate Program (online or onsite) • ongoing

#### **♦**Student Branches

Trinity University had a pizza talk in February. The topic was innovations in nano-technology. UT-Austin students described their GNU Radio project at the spring CTS planning meeting. GNU Radio was featured in the October IEEE Spectrum magazine.

Robotics and circuit design teams are finalizing their projects in preparation for the Region 5 competition at the University of Arkansas April 21-22.

St Mary's University - San Antonio (for more information)

Faculty Advisor: Djaffer Ibaroudene, Email: dibaroudene@stmarytx.edu

Branch President: Joshua Cavazos, email: jcavazos1@stmarytx.edu

**Trinity University** - San Antonio

Faculty Advisor: Farzan Aminian, Email: <a href="mailto:farzan@engr.trinity.edu">farzan@engr.trinity.edu</a>
Branch President: Will Johnson, email: <a href="mailto:william.johnson@trinity.edu">william.johnson@trinity.edu</a>

**University of Texas at Austin** (for more information)

Faculty Adivsor: Sriram Vishwanath, email: <a href="mailto:sriram@ece.utexas.edu">sriram@ece.utexas.edu</a>

Branch chair: Rossen Tzartzev, email: chair@ieee.utexas.edu

Links
Your IEEE
Calls for Papers
IEEE Xplore
What's New at IEEE
IEEE Standards
Association
About the IEEE
The Spectrum
IEEE-USA

To contribute information to this electronic newsletter, please send it by e-mail to robersondj@ieee.org.





University of Texas at San Antonio (for more information)

Faculty Advisor: Yufang Jin, Email: Yufang.Jin@utsa.edu

Branch chair: Nickolas Grady, gradyn@hotmail.com

#### **Back to Contents**

#### **^**Calls for Volunteers

#### Inspire Innovation: Engineering in the Classroom

Come and discover how you can enhance your efforts to bring exciting engineering education to your local schools and pre-university educators. Participants will use fun, student-tested engineering activities sponsored by the ASCE, ASME, IEEE and JETS. This workshop will feature inquiry-based learning, incorporating national education standards and discuss issues of gender and diversity in engineering education. Participants will have the opportunity to gain insight into outreach programs and activities that will help you organize public outreach events and train other volunteer engineers. Resources will be provided and will include instructional booklets, lesson plans, videos, CDs, DVDs, print materials and much more. Participants will also learn to identify and work with educational partners including schools, PBS stations, museums and youth groups.

The event is Friday, March 16, from 1-4p at the Marriott River Center (101 Bowie Street) in Salon I. It is free, and light snacks will be served. Register by 9 March at the website <a href="http://www.ieee.org/web/education/preuniversity/ITEA\_Volunteer\_Workshop\_Registration\_2007.html">http://www.ieee.org/web/education/preuniversity/ITEA\_Volunteer\_Workshop\_Registration\_2007.html</a>) or if you have more questions, contact Jessica Czeczuga at (732)562-5496.

#### ExxonMobile Texas Science and Engineering Fair Judge

The ExxonMobil Texas Science and Engineering Fair is the State science fair offering two levels of competition: Juniors for students in grades 6 through 8, and seniors for students in 9th through 12th grades. Students enrolled in accredited home-school programs are also eligible.

To qualify for state competition, students must win first, second, or third place in their category at an ISEF-sanctioned regional science fair. There is no other mechanism through which students can advance to the state fair, and no exceptions can be made regarding grade level requirements.

The event is Friday, April 6, 2007 at the Henry B Gonzalez Convention Center in San Antonio. Judges are

briefed at about 8am on their duties, (breakfast begins at 7am), and shortly thereafter enter the display area to begin their duties. Check out their website (http://emtsef.org) and sign up. You get to indicate a preference for an area of expertise. (ed note: I did this and it was alot of fun! These kids are bright and interested! They are short of technical types of judges - especially engineers!)

#### IEEE POTENTIALS Magazine Call For Papers

Potentials Magazine, the IEEE periodical dedicated to serving the needs of students and entry-level engineers, is looking for authors. All IEEE members have access to Potentials through IEEEXplore.

Manuscripts can deal with theory, practical applications or new research. They can be tutorial in nature. Equations should be kept to a minimum. Articles without equations are preferred.

No more than 12 references should be listed at the end of a manuscript. There should not be any embedded reference numbers. If it is necessary to cite authors for key points or quotes, their names can be stated in the text and a full reference given at the end.

Graphs and diagrams must reproduce well at published size. This means a minimum of 300 dpi for jpeg-, tiff- or eps-formatted figures at published size. Figures should be limited to ten or less. Articles should be 2,000 - 4,000 words in length. Four to six lines about the author and co-authors may be included.

For author guidelines, visit <a href="http://www.ieee.org/potentials">http://www.ieee.org/potentials</a>. Articles can be submitted at <a href="http://mc.manuscriptcentral.com/pot-ieee">http://mc.manuscriptcentral.com/pot-ieee</a>.

# 2. Chapter Activities

#### Multiple Chapters

On 1 May at 5pm, someplace in Austin, there will be an engineering networking event. Save the date! We've all heard of these grand meetings - specifically designed for upper management and senior leadership - This is NOT one of those! This is to be a networking event for the working engineer, and will sponsored by the Austin Chamber of Commerce. *Stay tuned for more details.*.

#### Joint Circuits and Systems/Solid-State Circuits

**Topic or Presentation Title:** Review of Topics from IEEE Intl Solid State Circuits Conference

Speaker:

Date and Time: Tuesday, March 13 6:30PM

Cost:

Reservations:

Meeting Location: UT Campus - ACES 2.402 Auditorium

Anyone interested in becoming a Chapter Officer, participating as a Volunteer, or desires to participate in the planning of 2007 CTS CAS/SSC Chapter activities should attend.

If you have interest in becoming an officer should contact <u>seningen@ieee.org</u> prior to the Jan 9th meeting.

For further information, contact Mike Seningen at seningen@ieee.org or Carol Jens at c.jens@ieee.org.

#### Computer Society - Austin [for more information]

Topic or Presentation Title: Coming Soon: Wireless USB

**Speaker:** Dr Jim Lansford

**Date and Time:** Wednesday, March 21, 2007, 6:30-8:30p

Cost: Free

Meeting Location: National Instruments, 11500 North MoPac, Building C, room 1S13, Austin, TX 78759

See <a href="http://austin-cs.org/">http://austin-cs.org/</a> for detailed directions and for last minute information. This presentation is open to the public.

#### Joint IEEE Computer Society, Austin SPIN meeting

**Title:** People Capability Maturity Model (People CMM)

Speaker: Gian Wernyss

**Date:** March 22, 2007, 6:00 pm to 9:00 pm

Cost: Free, but you must pay for your own parking

Location: Austin Hilton, 500 East 4th Street, Austin TX 78701

#### Computer Society - San Antonio [for more information]

**Topic or Presentation Title:** Tour of the MEMS Lab at UTSA

Speaker:

Date and Time: Thursday, March 22, 2007

6:30 p.m. - Networking; 7:00 p.m. - Dinner; 8 p.m. - presentation

Cost: \$10 members, \$2 students \$13 non-members

Reservations: Email Yu Zhang by Mon, March 19, (210) 999-7399

Location: Skyline Room, Coates Center, Trinity University, San Antonio, TX.

**Directions:** Please note that we have parking instructions on the Web site. The Alamo Stadium parking is

reserved for Alamo Stadium Event parking. Please check out the instructions at <a href="http://www.ieee-cs-ats.org/maeting.details.htm">http://www.ieee-cs-ats.org/maeting.details.htm</a> for the marking by Louris Auditorium

cts.org/meeting\_details.htm for the parking by Laurie Auditorium.

More information on the program is available at our Web site <a href="http://www.ieee-cs-cts.org">http://www.ieee-cs-cts.org</a>.

#### **★**Consultants Network [for more information]

**Topic:** An Introduction to Accessibility

Speaker: Michael Moore

Date and Time: Thursday, March 22, 2007

Networking at 6:00 pm, Business and program from 7:00 pm to 8:30 pm **Cost**: \$5.00 minimum charge for the restaurant.. Supper is at optional extra cost

Reservations: Not required

Meeting Location: China Star Restaurant, 6134 Hwy 290 E, Austin TX

Directions: Westbound access road of 290E, just east of IH 35

**Speakers Bio:** Baccalaureates in Computer Science and in Business Administration. Accessibility Specialist for DARS (The *Department of Assistive and Rehabilitative Services*). Formerly Technology Specialist for *Knowbility*. Teaches classes on Accessibility. Served as a judge for Accessibility Internet Rally (AIR) competitions in Austin and Houston.

**Abstract:** Technological barriers associated with a variety of disabilities and the types of assistive

technologies that are used to minimize these barriers. Design strategies that can be utilized to ensure that software, web applications, and web sites work with these assistive technologies

April 26: Threat Modeling, by Ronald Mendell, MS, CISSP

The Consultants web directory is to be found at <a href="http://www.alesu.com/xltrp/ieeecons/listzero.htm">http://www.alesu.com/xltrp/ieeecons/listzero.htm</a>

#### ◆Electromagnetic Compatibility Society [for more information]

Topic or Presentation Title: Polymer based low capacitance ESD protection devices

Speaker: Karen Shrier, CEO of Electronic Polymers

Date and Time: Thursday, March 22 - food at 7:00, speaker at 7:30

Cost:

Reservations:

Meeting Location: Tipping Point Technologies on 360 in Austin

Мар:

Neither IEEE nor EMC membership is required and all visitors are invited to attend. For additional information, including map to the meeting location, please see our web site at <a href="http://ewh.ieee.org/soc/emcs/chapters/centraltexas/index.html">http://ewh.ieee.org/soc/emcs/chapters/centraltexas/index.html</a>

#### **★**Electron Devices Society [for more information]

#### **Topic or Presentation Title:**

Speaker:

Date and Time: Thursday, , 6p-7:30p (Refreshments: 6:00-6:30pm)

**Meeting Location:** 

**Directions:** <a href="http://www.sematech.org/corporate/map.htm">http://www.sematech.org/corporate/map.htm</a>

Please RSVP to  $\underline{wade.xiong@atdf.com}$  . We need accurate count to purchase refreshments.

**◆**Engineering in Medicine and Biology {for more information}

Topic or Presentation Title: Welcome to My World - Clinical Reality, Commercial Value

Speaker: Dr Patty Smith, Medical Director, Kinetic Concepts

Date and Time: Wed, March 21

6:30 p.m. - Networking; 7:00 p.m. - Dinner; 8:00 p.m. - Program

Cost: \$10 members/ free for students/\$15 non-members

Reservations: RSVP to Garrett Polhamus

Meeting Location: BSE 2.102 on the UTSA Campus, San Antonio

**Directions:** From I-10, take the UTSA Blvd exit, and head west. Turn at the second traffic light onto the UTSA campus, and take the 1st right and follow it to the last parking lot. The Biotechnology, Sciences and Engineering Building is the newest building on campus, and is the building on your left. The conference room is on the second floor.

For further information, please contact <u>Dawn Roberson</u>, 210-458-5520.

## **★**Engineering Management [for more information]

**Topic or Presentation Title:** 

Date and Time: Tuesday, at 5:45p

Location: El Gallo Restaurant, 2910 S. Congress

Cost: \$15 includes dinner (at the door)

RSVP: <a href="martinich@ieee.org">lmartinich@ieee.org</a>

For more info: http://www.ewh.ieee.org/r5/central\_texas/ems/

For other information about the Engineering Management Society activities, see the web site: <a href="http://www.ewh.ieee.org/r5/central\_texas/ems/">http://www.ewh.ieee.org/r5/central\_texas/ems/</a>

For information regarding chapter activities (and those wanting to volunteer), contact Leslie Martinich (leslie@competitivefocus.com) (512-423-5121).

#### Graduates of the Last Decade (GOLD)

**Topic or Presentation Title:** 

Speaker:

**Date and Time:** 

Cost

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Reservations: Kristi Hummel, khummel@ieee.org

**Meeting Location:** 

Directions:

#### **▲**Laser and Electro Optics Society

**Topic or Presentation Title:** 

Speaker:

Date and Time:

Cost:

Reservations:
Meeting Location:

**Directions:** 

For more information, contact Ray Chen <a href="maychen@uts.cc.utexas.edu">raychen@uts.cc.utexas.edu</a>.

#### **⚠**Power Engineering Society

Power Engineering Society - Austin [for more information]

Topic or Presentation Title: Improve Genset Availability by Detecting Bad Batteries Early

**Speaker:** Bill Kaewert, President & Chief Technical Officer, Stored Energy Systems LLC (SENS).

Date and Time: Tuesday, March 27 with the social beginning at 6pm

Cost: \$12 IEEE Members, \$15 non-IEEE members, free for full-time students

Reservations: Please RSVP to Stan Friend or go to our web site at

http://www.ewh.ieee.org/soc/pes/centraltexas/index.htm.

Meeting Location: El Gallo Mexican Restaurant at 2910 S Congress

**Directions:** 

For further information, please contact Stan Friend

**Speaker Bio:** Bill has nearly 30 years diverse experience with mission-critical systems including mainframe computing, field service, information technology consulting, and startup of two power quality companies. He is a recognized industry authority on improving battery system reliability at low cost. Bill is experienced in leading organizational change including complex product development and high performance business systems such as Lean Manufacturing. Bill received his BA in History from Dartmouth College and MBA from Boston University.

**Abstract:** Despite advances in nearly every aspect of standby and emergency diesel generator performance, failure to start continues to be the biggest avoidable cause of diesel generator failures. More than 80% of failures to start are caused by battery problems. Today, most gensets do not include any means to detect if the starting battery has deteriorated and is not fit to start the engine. Genset failure can cause large economic losses and, in some cases, loss of life. The presentation discusses a practical, low cost battery failure detection technology that will significantly reduce the risk of genset start failure. The detection scheme can be used either in new installations, or be retrofitted at low cost to existing sites.

Power Engineering Society - San Antonio [for more information]

Topic or Presentation Title: Anatomy of an Accident: How Lack of Documentation Will Cause Problems

Speaker: James Mercier, TxDOT

Date and Time: Thursday, March 22
6:00 Social, 6:30 Dinner, 7:30 Program

Cost: \$10 members, \$15 non-members, FREE for students

(Cash only please, no checks or credit cards)

Reservations: Meal Choices:

1. Fried Fish Sandwich

- 2. Chicken Avocado Salad
- 3. Hamburger

->->Please let us know your meal choice when you RSVP<-<-

RSVP: Please RSVP to Steven Mouser @ 210-658-7250.

For more information go to our web site at <a href="http://ewh.ieee.org/soc/pes/centraltexas/sanantonio/index.html">http://ewh.ieee.org/soc/pes/centraltexas/sanantonio/index.html</a>

As always you do not have to be an IEEE member to attend.

For more information go to our web site at <a href="http://ewh.ieee.org/soc/pes/centraltexas/sanantonio">http://ewh.ieee.org/soc/pes/centraltexas/sanantonio</a>

Meeting Location: Blue Star Brewery, 1414 South Alamo Street, San Antonio, TX 78210-1117, 210-212-

5506

Directions: Available on our website.

**♠**Product Safety Engineering Society [for more information]

Topic or Presentation Title: Behind the Scene: What Happens When the Power Goes Out!

Speaker: Austin Energy (City of Austin Electric Utility)

Date and Time: Tuesday, March 19th, 6:30pm

Cost: None

Reservations: None

Meeting Location: Dell, Parmer Campus, Parmer South Building 4, Victoria Conference Room.

**Directions:** Call Dale Ritzen (512) 651-5338 for details and directions.

We encourage you, others in your organization, or other interested parties to participate in our meetings. The PSES meets on the third Tuesday of every month at 6:30, with the program starting at 7pm. Instead of a regular meeting in November or December, a combined monthly meeting is held in early December to allow members and guests to enjoy the Thanksgiving and Christmas holidays. For further information about the PSES, please contact Dale Ritzen at (512) 651-5338.

Chapter Chair: Gary Schrempp(gary\_schrempp@dell.com).

#### ▲ Joint Signal Processing/Communications Society [for more information]

**Topic or Presentation Title:** Mathematics of Reliability analysis on Communications Networks

Speaker: Paul Kaschube, Principal Member of the Technical Staff, AT&T Labs Date and Time: Thursday, March 22, 2007 at 7pm - Rescheduled from January

Cost: Free; Sandwiches and soft drinks will be served

Reservations: RSVP to Steve Crowl stevenc@stedwards.edu

Meeting Location: AT&T (formerly SBC) Labs - 9505 Arboretum Blvd, Austin, TX 78759

**Directions:** 

http://maps.yahoo.com/maps\_result?newFL=Use+Address+Below&addr=9505+arboretum+blvd&csz=7875

**⚠**Women in Engineering [for more information]

**Topic or Presentation Title:** 

Speaker:

Date and Time: Thursday

Cost:

Reservations: Meeting Location:

Women in Engineering has been an Affinity Group of the Central Texas Section since the Fall of 2002.

Additional information is on the WIE website at <a href="http://www.austin-wie.org">http://www.austin-wie.org</a>...

#### Editor's Notes

The goal of this newsletter is to provide the more than 6500 members of the Section with up-to-date and meaningful information. We welcome contributions and suggestions that will improve the newsletter. Please contact the editor, Dawn Roberson at robersondj@ieee.org if you have any thoughts or suggestions. The deadline for submission is the 25th of the month.

To add your name to the list who get the Analog, send an email from the address to be added to listserv.ieee.org. Put only the following text in the body of the message: subscribe cts-section.

If you no longer wish to receive the Analog, follow the directions as listed above, but instead of subscribe, put 'unsubscribe cts-section'.

#### **Back to Contents**

#### 3. IEEE Info

THE INSTITUTE : can be found at http://www.ieee.org/theinstitute

#### **IEEE Member Benefit:**

IEEE Members access the world of technology. Search more than 1,100,000 documents in IEEE Xplore. Subscribe to IEEE Society publications at low, member-only rates. Purchase papers online for just \$13 each -- or save even more when you subscribe to the IEEE Member Digital Library.

Get the most from your IEEE membership -- find out how today: http://boldfish.ieee.org/u/market8+/04196044

IEEE-USA NEWS & VIEWS: IEEE Career-Building Resources: \*BOOKMARK THIS SITE\*: For career-building resources, including articles and product and service notices, visit IEEE-USA's CAREER NAVIGATOR at: <a href="http://ieeeusa.org/careers/">http://ieeeusa.org/careers/</a>. IEEE XELL [a.k.a. Expert Now IEEE] GAINS SOCIETIES' SUPPORT

# **№Preview Online IEEE-backed, engineering-based reality PBS TV Show, 'Design Squad'**

WASHINGTON (22 February 2007) -- As National Engineers Week and George Washington's birthday are being celebrated in the United States this week, the first of 13 episodes of a new IEEE-backed engineering-based reality TV show, "Design Squad" is being broadcast in a "sneak preview" on selected local public television stations nationwide.

The first PBS program on "The Need for Speed" can be viewed now online at <a href="http://www.pbskids.org/designsquad">http://www.pbskids.org/designsquad</a>

Intended for youngsters in the critical "tween" age group of 9 to 13, the series is part of a national, multimedia initiative designed to pique interest -- especially among girls and minorities -- in engineering concepts and challenges, such as designing an alarm that can be turned on and off and is small enough to hide. "Design Squad" will air on many PBS stations in the U.S. following local pledge weeks in March and April.

To find local PBS stations and listings, go to <a href="http://pbskids.org/tvschedules/localizer.html?dest=/designsquad/show/index.html&nola=DESQ&station">http://pbskids.org/tvschedules/localizer.html?dest=/designsquad/show/index.html&nola=DESQ&station</a>

Major funding for the program is provided by the National Science Foundation and the Intel Foundation. Additional funding is provided by the IEEE, the American Society of Civil Engineers, Tyco Electronics and others.

"Design Squad" features two teams of real-life high-school students (in collaboration with two 20-something engineer hosts) who use their problem-solving skills to design, construct and test engineering projects. The projects include a machine that automatically makes pancakes and (in the first episode) a motorized red wagon that can reach speeds up to 20 miles per hour.

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in the first episode, the red and blue teams are chanenged to turn the wagon into a dragster using drins as a motor. The teams engage in brainstorming, designing and building, redesigning and building, and finally testing and evaluating.

During "Design Squad," key engineering and science concepts are illustrated through dynamic animations. The design process guides teammates as they take on every engineering challenge. And problem-solving "habits of mind," such as learning from failure and drawing simple models to communicate ideas, are tools the youngsters adopt as they construct their machines.

For more information on how you can support and participate in "Design Squad," go to <a href="http://www.pbskids.org/designsquad">http://www.pbskids.org/designsquad</a>

# **▲IEEE Foundation Seeking 2007 Grant Applications**

The IEEE Foundation is seeking grant applications for 2007 projects in accordance with its objective to improve the technological literacy of society from childhood through adulthood.

During 2007, unsolicited applications will be accepted in three cycles from IEEE units and other organizations working in areas of relevance and importance to the IEEE and its membership. Projects should achieve one or more of the following objectives:

- \* Improve primary and secondary science, technology, and math learning
- \* Encourage pre-university students to consider engineering as a career path
- \* Increase the public's understanding of the role of engineers and technology in society
- \* Preserve the history of IEEE associated technologies
- \* Tap the technological expertise of IEEE members
- \* Demonstrate ability to be replicated

Applications are considered twice during the year. The application deadlines are: (1) 13 April 2007 for consideration at the June 2007 IEEE Foundation Board meeting; or (2) 7 September 2007 for consideration at the November 2007 IEEE Foundation Board meeting.

To learn more about the IEEE Foundation's grant guidelines, and to submit an online application, visit <a href="http://www.ieeefoundation.org">http://www.ieeefoundation.org</a>.

#### The Institute seeks Section Region and Society News

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The IEEE Institute member newspaper is seeking more Section, Region and Society news items in an effort to broaden its coverage and help these entities publicize their activities.

Appropriate subjects include:

- \* Recognitions that members receive such as promotions, appointments, awards, or honors from their community or government.
- \* Recognition that members receive from an IEEE entity, such as an award
- \* Interesting jobs or hobbies for member profile pieces.
- \* News about IEEE student members, student branches, student activities, and competitions.
- \* New products, services, or activities that the Society, Section, Region or Student Branch is offering.
- \* Successful social or technical events or meetings.
- \* Obituaries on members.

Send the basic "who, what, when, where, and how," and the Institute editors will be in contact if more information is needed.

The editors are also looking for suggestions for topics to write about, whether it's IEEE related or something about the engineering field.

Email your news to: theinstitute@ieee.org.

# **▼IEEE-USA Offers Resources to Assist Tech-Based Entrepreneurs**

The new IEEE-USA Entrepreneurs Village is an online portal designed to provide high-tech entrepreneurs with tools and resources conducive to innovation and company growth. The portal links high-tech entrepreneurs with their peers, and prospective entrepreneurs with mentors. Village members can seek advice and information on such topics as organization, funding, marketing, human resources, asset requirements, growth, best practices, and legal and government issues. A search engine will assist you in finding the right match for your needs. Experienced entrepreneurs are encouraged to become mentors.

To read the related news release, visit: http://boldfish.ieee.org:80/u/2682/135523

Visit the Village at: http://boldfish.ieee.org:80/u/2683/135523.

# Fourth Annual IEEE-USA Career Fly-In

March 13 - 14, 2007

Who: All IEEE members in the United States (no experience necessary).

Where: Washington, D.C.

What: A golden opportunity to speak up on behalf of your profession.

In 2006 Congress debated major changes to our nation's immigration laws. Part of that debate included a major expansion of the H-1B program and other changes to the high-skill immigration system. But because these programs are small, relative to the broader immigration system, Congress never focused on these provisions and almost passed them without much debate.

IEEE-USA needs your help to make sure that doesn't happen again.

All IEEE members in the United States are invited to join IEEE-USA for a day and a half visit in our nation's capitol. Participants will receive a comprehensive briefing on the current high-skill immigration debate in Congress, the political situation we face, and what can be done about it. Then, on March 14th, participants will be able to express their concerns in private meetings with their elected officials.

Before Congress can intelligently formulate high-skill immigration policy, they have to focus on it. Legislators and staff are never more focused than when they are meeting with their voters. It sends a very strong message to politicians when their voters take the time to travel to Washington.

Help IEEE-USA fight for intelligent immigration reform by joining us in Washington on March 13 and 14th.

More information, including registration, can be found here: http://www.ieeeusa.org/policy/flyin/career/default.asp

In politics, numbers matter. We need as many engineers as possible to help us grab Congress' attention. High-skill immigration has a profound impact on the engineering profession. Your Members of Congress need you to explain this to them.

# Ready to Learn With Online Tutorials

The problem: you have to get up to speed quickly on, say, the python programming language. The solution: start with the new ReadyNotes online tutorials from the IEEE Computer Society. Seven tutorials are out so

far, and the one-stop guides provide practical nuts-and-bolts instruction across a range of topics geared to software developers, IT professionals, computing instructors, and students. Read more at <a href="http://boldfish.ieee.org:80/u/2598/00757617">http://boldfish.ieee.org:80/u/2598/00757617</a>

# **▶IEEE Teams with IBM to Launch TRYENGINEERING.ORG**

IEEE and IBM have collaborated to launch a new website that combines interactive activities with information on careers in engineering. TryEngineering.org is designed to educate a variety of audiences about the different engineering disciplines and the impact engineers have on society. Targeted toward teachers, school counselors, parents and students, TryEngineering.org lets site visitors explore how to prepare for an engineering career, ask designated experts engineer-related questions and play interactive games. Tools for teachers include lesson plans and engineering projects as well as a list of student competitions and science and engineering-oriented summer camps.

The site will be launched on 5 June with a searchable list of accredited engineering programs in the U.S. and Canada, and will be expanded to include programs in other English-speaking countries as well as Germany and France. For more information contact Doug Gorham, Educational Activities, at d.g.gorham@ieee.org or +1 732 562 5483 or Allison Ickowicz at a.m.ickowicz@ieee.org or +1 732 562 5496.

# **▲Is Digital Copyright Legislation Going Too Far?**

Tinkerers and electronic consumers beware. Legislation involving new electronic recording devices and digital, audio, or video playback technology severely compromise electronics industry innovation. According to IEEE Spectrum's Tekla Perry, "The Digital Millennium Copyright Act was the first federal law passed that directly attacks the fair use rights of consumers and product developers. But more such laws are in the pipeline." Tune into IEEE Spectrum Online's exclusive radio report at <a href="http://bmsmail3.ieee.org:80/u/3497/00757617">http://bmsmail3.ieee.org:80/u/3497/00757617</a>

# **▲IEEE** membership portal

We hope all Section members are taking advantage of the new IEEE Membership Portal. The IEEE History Center is supplying interesting content which will be featured on the main page. Visit it at <a href="http://www.ieee.org/myieee">http://www.ieee.org/myieee</a>.

The state of the s	Back to Contents