

May 2012

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IEEE/Orange County Website: www.ieee.org/ocs

ORANGE COUNTY SECTION

The Chair's Corner:

Greetings!

With increased sunshine in Southern California, IEEE Orange County Section (OCS) and the chapters have been very actively involved in providing several programs and events to all current and future members.

We have started general and interdisciplinary events at the Section level with continued chapter events. All these events accept iDollar that was offered to around 50 volunteers at the section and chapter levels. We will also recognize all the volunteers in the last 50 years by profiling them at our website as part of OCS Golden Jubilee.

The Section's Annual Meeting and Award Dinner is on May 19th 2012. We extend the invitation to everyone (details inside).

As always, I hope you will benefit from and contribute to IEEE Orange County Section and Chapters and I welcome your advice and feedback.

Best,

John Collins, Ph.D.

Chairman, IEEE Orange County Section



IEEE OCS Executive Advisory Committee

The following leaders have been identified as Executive Advisory Committee.











Dr. Raman Unnikrishnan

Dr. Jean-Luc Gaudiot

Mr. Philip Wheeler

Dr. G. P. Li

Ms. Paula Golden

In a meeting on April 24th with the OCS Chair, the Advisory Committee presented their perspectives on STEM education and professional activities for IEEE OC Section. Suggestions have been made to involve IEEE members to promote Mathematics in a local High School and Engi-

neering Activities among undergraduate students.

Please contact OCS Chair (collins.at.ieee.org) if you would like to volunteer in these areas. Another avenue to participate in OC STEM Initiative is to sign up at http://ocstem.org/NLNForm.aspx

IEEE Orange County Section Annual Meeting and Award Dinner

www.ieee.org/ocs

Dear colleagues,

It is with great pleasure that we personally invite you to the IEEE-OC Section Volunteer Recognition & Awards Banquet.

Date: Saturday, May 19, 2012. 5:30-9 pm

Venue: Wyndham Hotel Orange County, 3350 Avenue of the

Arts, Costa Mesa, CA 92626

Dinner ticket: \$25 (inclusive of tax and parking)

RSVP: Russell Hunter russellh@computer.org by 15th May, 2012

During the Awards Dinner, there will be a free parallel activity "Lego Robotics Build and Play" for children ages 6 -12 by Mathobotix

Looking forward to seeing you at the event. Please, feel to contact us if you have any questions

Best Regards from all of us,

Russell Hunter, Past Chair/Awards Chair John Collins, Chairman Alvin Joseph, Vice Chair/Awards Coordinator Mario Manasala, Treasurer Shireesh Verma, Secretary



Wyndham Hotel Orange County 3350 Avenue of the Arts, Costa Mesa, CA 92626





OCS History Committee Report:

I am seeking any history source of information regarding the early OCS IEEE. I had lived and worked in LA County and was active in the LA Section in the IRE Professional Group on Automatic Control, didn't move to OC until '65 and wasn't really active in the OC Section until the early 70's ... so my ignorance runs deep. I really need your help in reconstructing the "early days" of our OC Section.

If I've already impulse you, please respond. If I haven't please take the initiative and shout, "Yes, I remember something ...!" I'll bet you do.

Thanks.
Stan.White@ieee.org

Receive i\$50 by volunteering in the IEEE OC Section or Chapters

We introduce iDollar as an incentive to all volunteers for their involvement in the Section's programs. The iDollar can be used towards registration, food and other fees at the Section's events. The iDollar will serve as a motivator for volunteer involvement, their professional development and extending benefits to all IEEE Members.

The iDollar will bankroll the cost of a volunteer attending Chapter or Section events. As an incentive, we propose to issue ten \$5 iDollars (\$50 total) to each new volunteer. We will have a registry of all their names and IEEE Member numbers from those who were issued these iDollars, signed by the volunteer. The issued iDollars will have the volunteer's name and member number at the back of the bill. When the volunteer attends a Chapter (or Section) event, s/he shall put the event name and date at the back of the bills and hand them to the Chapter (or Section) Treasurer/Event Coordinator. In the following Section meeting the Chapter Treasurer will sign the back of the iDollars collected and redeem them as chapter funds from the Section. The Section will verify the bills against the registry before transferring funds to the Chapter. The volunteer does not get cash, the Chapter Treasurer redeems the funds to the Chapter. To add security, a wet stamp will be used on all iDollars issued to a volunteer.

We are confident that the iDollar program is simple and secure to attract and involve new Orange County Section volunteers.

Mario Manansala manansala@ieee.org

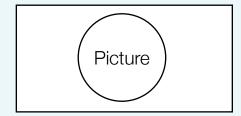
UCI Engineering Events

Newsletter Inputs

We will publish IEEE Orange County Section Newsletter in the beginning of every month. Please provide any Orange County news, engineering conference details, expert view on engineering in Orange County, engineering article or engineering success story to info@nanomems-research.com no later than the 15th of a month. We'll publish the items in the following month. In your e-mail, please, enclose your news item between two lines of "+" characters, i.e.:

News Item Title

Newsletter content Newsletter content, Newsletter content Newsletter content Newsletter content, Newsletter content Newsletter content



We will be transitioning to a website-only submission model in which your news inputs may be submitted at any time. Information on the website address and logistics, will be provided soon. Please, stay tuned.

Thank you,

Hector J. De Los Santos, IEEE Orange County Section, Newsletter Editor



The IEEE Orange County Upcoming Events

May 4

Irvine Valley College: Open House for Electrical Technology Trainee Program Location: Irvine Valley College, Bldg B309.

May 17

Fundamentals of Motor Protection

Speaker: Suhag Patel, P.E. Industrial Electric Machinery (IEM)

Location: The Doubletree Club Orange County Airport

7 Hutton Centre Dr., Santa Ana

May 21

Introduction to iOS: iPad and iPhone Programming

Speaker: Professor Michael Shafae College of Engineering and Computer Science, California State University -Fullerton

June 2

Curiosity - Mars Rover

Speaker: Charles Baker, Nagin Cox Location: Brandman University, (Room 111)

June 11

ARINC Global Network and "Rapyd-Connex" mobile broadband service

Speaker: Ronald Watt Senior Director and Chief Technologist – RapydConnexSM by ARINC, Advanced Systems Engineering and Integration Division, Defense Systems Engineering Location: Doubletree Club Hotel – Orange County Airport, 7 Hutton Centre Drive, Santa Ana, CA 92707-5794

June 12 III-V's: From THz To CMOS

Speaker: Prof. Jesus A. del Alamo Microsystems Technology Laboratories MIT, Cambridge, MA

Location: OC Plaza

2575 McCabe Way, Irvine, CA

September 6 & 7

2012 IEEE-CPMT/IMAPS Advanced Technology Workshop on Opto-electronic Packaging and Assembly

Location: Embassy Suites 3100 East Frontera Street, Anaheim, CA

Oct 24

IEEE OC Tech Job Fair

Oct 24

IEEE OC Student Design Contest

If you'd like your event to be included, please email details to me@sharonforsberg.com

IEEE OCS Volunteers in the last 50 years

As we celebrate the 50th anniversary of IEEE/OCS next year, we would like to post the biographies of all of our volunteers (Section-level and Chapter-level) on our website – both to give visibility and kudos to the volunteers, and to motivate new members to join the efforts.

Many of you already have a biography that we can post, and if you send your biography to lin.crampton.at.gmail.com, we can get it posted.

For those of you who do not have a biography handy, some of the things that are good to include are:

- Name
- Current IEEE position
- Picture
- Contact (email address, linked-in, twitter)
- Education
- Career highlights and achievements
- Publications (papers, books websites, blogs)
- IEEE membership history and past positions
- Other professional organizations or associations
- Personal information optional

A biography on the IEEE site carries a lot of Internet authority, so we encourage you to take this opportunity to highlight your achievements. If you are uncomfortable writing about how wonderful you are, send an email answering the bullet points above to lin.crampton.at.gmail.com and she will do a rough draft that you can use as a starting point. You will have final approval on the biography we post.

Included below are some links to IEEE biographies, to give you an idea of what an IEEE biography looks like.

http://www.ieee.org/about/awards/bios/emberson_recipients.html

http://ewh.ieee.org/r1/princeton-centraljersey/bios.html

http://cpmt.ieee.org/about-cpmt/61-cpmt-member-at-large-bios

http://www.usfirst.org/community/volunteers/senior-mentor-bios

https://www.csunalumni.com/default.aspx?Page=VolunteerServiceEmeritiBios

http://minesonline.net/s/840/NHindex.aspx?sid=840&gid=1&pgid=496

Contact:

lin.crampton@.at.gmail.com





Micro/nano Systems for Biomedical Applications

| Date: | May 23rd 2012 (Wednesday) |
|--------------------|---|
| Time: | 6:00 pm - Food and Networking |
| | 7:00 pm – 8:00 pm |
| Location: | Lakeview Senior Center in Woodbridge Community Park. |
| | Free parking is available close by in designated spaces. |
| | http://www.cityofirvine.org/cityhall/cs/commparks/cparks/cparks_lakeview.asp |
| | Address: 20 Lake Road, Irvine CA 92604 |
| | (Located at Lake Road between Barranca and Alton) |
| Topic: | Micro/nano Systems for Biomedical Applications |
| Speaker Name | Professor Mark Bachmann of the University of California at Irvine |
| and Affiliation: | http://www.linkedin.com/in/markbachmo |
| Abstract: | Miniaturization technology can be applied to biomedical engineering to produce new products |
| | for health and medicine. However, biological systems are quite different from inorganic systems, |
| | and conventional techniques, such as silicon micromachining, need to be modified or abandoned |
| | when the product must be biocompatible. At UCI, we have developed a number of miniaturized |
| | devices for biomedical applications, and these have each required the development of new or |
| | modified manufacturing techniques. In this talk, I will discuss the nature of microfabrication for |
| | biomedical applications, and give examples from our work, including a microelectrode array that is |
| | implanted into the brain, and a biochip used to identify and study breast cancer cells. |
| Speaker Biography: | Professor Bachman is the Principal Investigator of the MIDAS laboratory (Microelectronic |
| | Integrated Devices And Systems) at UC Irvine. His team focuses on the development of minia- |
| | turized integrated sensor systems for use in human systems, industrial systems, and consumer |
| | electronics. His team has pioneered technologies for at-home health care, miniaturized bionic |
| | and assistive devices, and products for telecommunications. Professor Bachman's team works |
| | on research projects for government, foundations, and industry. |
| | Professor Bachman is Director of the eHealth Collaboratory at Calit2-Irvine, a multidisci- |
| | plinary center devoted to exploring the use of technology for empowering human health and |
| | well-being. In addition, Professor Bachman is Founding Director of UCI's Bio-Organic Nano- |
| | fabrication Facility, Founding Associate Director of UCI's Integrated Nanosystems Research |
| | Facility, Program Director of UCI's NSF IGERT LifeChips program. Professor Bachman teaches |
| | courses in MEMS, BioMEMS, optoelectronics, and engineering design. He is the author of over |
| | 10 patents and more than 60 peer reviewed journal and conference publications. Professor |
| | Bachman received his Ph.D. in experimental particle physics from the University of Texas at |
| | Austin. Prior to joining the engineering faculty, he spent ten years as a research physicist devel- |
| | oping particle detectors and large scale analysis and simulation software systems for interna- |
| | tional physics collaborations. |
| Reservation: | Pre-register at http://ieeeocsprogram.eventbrite.com/ |
| Fee for Food: | \$5 for pre-registered members/volunteers (i\$) |
| | \$10 for unregistered members/volunteers |
| | (Receive free i\$50 by volunteering in IEEE OC Section or Chapters) |
| Contact | Send questions to OC Section Program Chair, "Ciaran O'Donnell" email: |
| | ciaran@josephmediatools.com |
| | E Oranga Caunty Castian www.inco.org/one |





IEEE Orange County Computer Society (OCCS) Is Pleased to Present:

Introduction to iPad/iPhone Programming

| Date: | May 21, 2012 | | |
|-------------------------------|--|--|--|
| Topic: | Introduction to iPad/iPhone Programming | | |
| Speaker Name and Affiliation: | Professor Michael Shafae , PhD | | |
| Abstract: | The popularity of Apple's iOS platform is undeniable. In no small part, the popularity can be traced to the diverse ecosystem of applications available for the iPhone and iPad, all of which are sold and distributed via Apple's App Store. For current and budding software developers, the lure of an exciting and potentially lucrative app market is intoxicating. Games, social media and business apps can be quickly developed and distributed using Apple's development tools. This talk will endeavor to introduce attendees to Apple's tools and technologies as they relate to writing applications for iOS. The talk will include an overview of Apple's development tools, UlKit API, and several demonstrations building applications for iOS. The main goal of this talk is to give all attendees the skills they need to go straight out and start developing games that can be sold on the Apple App Store immediately. | | |
| Speaker Biography: | Michael Shafae has a Ph.D. in Information and Computer Science from University of California, Irvine. He is currently an Assistant Professor in the Computer Science Department at California State University, Fullerton. He teaches courses in computer graphics, computer games and iOS application programming. | | |
| Time: | 6:00 PM to 9:00 PM (PT) | | |
| Location: | Brandman University 16355 Laguna Canyon Road , Irvine, CA 92618 | | |
| Cost | Regular: \$10.00 Student IEEE Members and Unemployed IEEE Members(FREE): \$0 Presentation Only (FREE): \$0 | | |





IEEE Orange County Computer Society (OCCS) Is Pleased to Present:

Curiosity — Mars Rover

| Date: | June 2, 2012 | |
|------------------|---|--|
| Topic: | Curiosity - Mars Rover | |
| Speaker Name | Charles Baker, Nagin Cox | |
| and Affiliation: | | |
| Abstract: | A Special Presentation on The Latest Mars Rover Mission & Landing | |
| | FEATURING: Two Lead JPL Mission Engineers (Charles Baker & Nagin Cox) | |
| | Amazing JPL Mars Rover Landing Simulation Videos | |
| | Possible Actual Curiosity Hardware and/or Mock-ups | |
| | Exhibit Tables from Several LA & OC Professional Societies | |
| | (The Planetary Society, IEEE, INCOSE, AIAA & others) | |
| | KEY TALK TOPICS: What Have We Learned About Mars To-Date? | |
| | What Do We Hope to Learn about Mars from Curiosity Mission? | |
| | What Were Engineering Challenges in Designing Curiosity? Come to this special talk on | |
| | Saturday, June 02, 2012, two months before the historic landing of Curiosity on Mars! | |
| | Curiosity is the largest and latest Mars rover and has been described as being a Mini Cooper | |
| | on 6 wheels. It is carrying advanced science experiments that include a laser for pulverizing | |
| | rocks, and it will be the first craft to ever attempt a "sky-crane" landing. | |
| Time: | 2:00 PM to 5:00 PM (PT) (Doors Open at 1:30pm!) | |
| Location: | Brandman University (Room 111) | |
| | 16355 Laguna Canyon Road | |
| | Irvine, CA 92618 | |
| Cost | FREE (Parking, Admission, Bottled Water & Healthy Snacks!!!) | |
| Note | This is also an LA/OC-Area-Wide Science, Technology, Engineering & Math (STEM) Outreach | |
| | Event, so High School & College Kids are most welcome!!! | |
| Contact | RSVP ASAP to: http://occs-060212.eventbrite.com | |
| | Event Questions to: Fred Lawler, (657) 464-9314, fredlawler@hotmail.com | |



We have 16 teams and 62 students participating in the competition. Each team will receive a hard disk as a generous gift from Western Digital. Important dates:

April 20, 2012 (Friday 11:59pm) - Proposal Submission May 16, 2012 (Tentatively - Wed. 2pm-7pm) -Final Presentation of top 5 teams and Awards Reception

http://www.clubs.uci.edu/ewh/design-competition/

Prof. William Tang, Chair EMBS Chapter, Wctang@uci.edu



IEEE Orange County EDS/MTT & IEEE's OC Solid-State Circuits Society (SSCS) Society Are Pleased to Present:

| Date: | June 12, 2012 | |
|--------------------|--|--|
| Topic: | III-V's: From THz To CMOS | |
| Speaker Name | Prof. Jesus A. del Alamo | |
| and Affiliation: | Microsystems Technology Laboratories | |
| | MIT, Cambridge, MA | |
| Abstract: | The ability of Si CMOS to continue increasing transistor density while delivering enhanced logic performance has recently come into question. An end to Moore's Law threatens the microelectronics revolution: a historical 50 year run of exponential progress in the power of electronics that has profoundly impacted human society. There is a family of materials that perhaps like no other is capable of addressing this problem: III-V compound semiconductors. The capability of some III-Vs to efficiently emit and detect light has made them widely used in lasers, light-emitting diodes and detectors for optical communications, instrumentation, and sensing. A few, notably GaAs, InGaAs and InAs, exhibit outstanding electron transport properties. Transistors based on these materials are at the heart of many high-speed and high-frequency electronic systems. In fact, a sizable and mature industry exists that manufactures III-V integrated circuits in large volumes for applications as diverse as smart phones, cellular base stations, fiber optic systems, wireless loca-area networks, satellite communications, radar, radio astronomy and many defense systems. The recent wide-spread use of handheld devices and their exploding consumption of data has represented a boon to this industry which is now characterized by highly automated and rigorous volume manufacturing in relatively large-area wafers, sophisticated device and circuit design tools, well established reliability | |
| | in many "mission critical" applications, and a layered industrial ecosystem that includes "pure-play" foundries, "fabless" design houses and extended and competitive supply lines. There is no other material class currently being considered to replace the Si channel in a MOSFET that can line up such an impressive list of attributes. This paper outlines the case for III-V CMOS, it discusses the most critical problems to overcome, and summarizes recent progress along the way. | |
| Speaker Biography: | Jesus A. del Alamo obtained a Telecommunications Engineer degree from the Polytechnic University of Madrid in 1980 and MS and PhD degrees in Electrical Engineering from Stanford University in 1983 and 1985, respectively. From 1985 to 1988 he was with NTT LSI Laboratories in Atsugi (Japan) and since 1988 he has been with the Department of Electrical Engineering and Computer Science of Massachusetts Institute of Technology where he is currently Donner Professor and MacVicar Faculty Fellow. Prof. del Alamo leads a research program on Si and compound semiconductor transistor technologies for RF, microwave and millimeter wave applications. In the last few years, his students have fabricated nanometer-scale transistors with world record high frequency operation. Prof. del Alamo is also investigating the use of III-V compound semiconductors to enable future ultra-low power CMOS generations. His group has demonstrated that InGaAs quantum-well field-effect transistors have superior scaling logic characteristics. Prof. del Alamo was an NSF Presidential Young Investigator. He is a member of the Royal Spanish Academy of Engineering and Fellow of the IEEE. He currently serves as Editor of IEEE Electron Device Letters. In 2012 he received the Intel Outstanding Research Award in Emerging Research Devices. | |
| Time: | 3:00-3:30 PM Networking 3:30-4:30 PM Lecture | |
| Location: | OC Plaza, 2575 McCabe Way, Irvine, CA http://www.nanomems-research.com/OC_MTT_EDS.html | |
| Cost | Free | |
| Note | TSeating is Limited, RSVP by 06/11/12 by sending e-mail to: info@nanomems-research.com Non-IEEE members also welcome. | |
| Contact | info@nanomems-research.com | |

UPCOMING EVENTS IN IEEE ORANGE COUNTY SECTION

Open House for IVC's Electrical Technology Trainee Program

Irvine Valley College is hosting an Open House for its Electrical Technology Trainee Program, on Friday, May 4, 2012, between 11am – 1pm, in Building B309. Enjoy lunch and refreshments while you meet faculty members, learn about IVC's new electrical courses, tour its modern training facilities, and view live demonstrations.

RSVP before April 27, 2012, by contacting Heather Whitecotton at (949) 451-5224, or email hwhitecotton@ivc.edu

2012 IEEE-CPMT/IMAPS Advanced Technology Workshop on Opto-electronic Packaging and Assembly

Our IEEE Components, Packaging and Manufacturing Technology (CPMT) Society - Orange County Chapter will be hosting the 2012 IEEE-CPMT/IMAPS Advanced Technology Workshop on Opto-electronic Packaging and Assembly. This workshop will feature an International Technology Roadmap for Semiconductors (ITRS) working session as well.

Dates: September 6 & 7, 2012

Location: Embassy Suites, 3100 East Frontera Street, Anaheim, CA 92806

Twelve industry experts will be giving invited talks on topics such as High Brightness LED, CMOS Image Sensors, Optical Interconnects & Silicon Photonics and Optical Transceivers & Networks, on Thursday, Sep 6, 2012. This industry session will also feature vendor exhibits.

On Friday, Sep 7, 2012, ITRS experts will be conducting a half-day working session, with a presentation on the ITRS working process and an interactive discussion about their optoelectronic packaging activities.

Please mark your calendars and plan on attending this important event for the Optoelectronics and related industry in our region. More details on the speakers, agenda and registration will be sent in the coming months.

For more information, please contact the General Co-Chairs of this workshop:

Robert Warren, Conexant Systems, Inc. robert.warren@conexant.com

John Mazurowski, Penn State Electro-Optics Center, jmazurowski@eoc.psu.edu

If you are interested in sponsorships and/or table-top exhibits, please contact:

Lawrence Williams, Ansys Corporation, larry.williams@ansys.com

Jaydutt Joshi, Skyworks Solutions, Inc., jaydutt@gmail.com

Sam Karikalan Chairman, IEEE CPMT Orange County Chapter samkarikalan@ieee.org



IEEE Orange County ComSig Is Pleased to Present:

ARINC Global Network and "RapydConnex" mobile broadband service



| Date: | Jun 11, 2012 | |
|-------------------------------|--|--|
| Topic: | ARINC Global Network and "RapydConnex" mobile broadband service | |
| Speaker Name and Affiliation: | Ronald Watt Senior Director and Chief Technologist – RapydConnexSM by ARINC Advanced Systems Engineering and Integration Division Defense Systems Engineering | |
| Abstract: | Mr. Watt will provide an overview of the ARINC Global Network and ARINC's RapydConnex mobile broadband service. ARINC is a world leader in aviation and transportation communications as well as engineering and acquisition support to the Department of Defense (DoD). ARINC operates a world-wide Layer-3 managed transport service; primarily for the air-transport industry, but also in support of several government/military organizations, rail transport providers, and other customers. The network is IP based. AGN spans 160 countries and provides connections to more than 1000 data processing centers and airports and delivers more than 25 million messages a day associated with critical airline mission operations and back office transactions. Servicing hundreds of customers that have unique mission, functional, and performance requirements, the AGN is a truly complex enterprise environment. The AGN provides multiple services, sensors, and integrated systems to support the overall safety-of-life mission of air traffic control and mobile user communications support. The AGN enterprise environment integrates space, user, and control segments to provide these services as well as connections to peer networks to facilitate Internet and Intranet access. ARINC has been a provider of Ku- and L- band based satellite communication for over 7 years. Launched in 2004, the current service offering, now known as RapydConnex, provides Beyond-Line-Of-Sight (BLOS) broadband connectivity for fixed and mobile applications. The Rapyd-Connex service provides customers voice, video, and data connectivity and uses the ARINC Global Network as a backbone. | |





Continued: ARINC Global Network and "RapydConnex" mobile broadband service

| Speaker Biography: | Mr. Ronald Watt is the Senior Busine | ess Director and Chief Technologist for ARINC's new RapydCon- | | |
|--------------------|---|--|--|--|
| | nexSM product line. RapydConnexSM provides viable and affordable open-architecture com- | | | |
| | nication solutions for mobile edge us | sers that are not able to get the bandwidth, connectivity, or | | |
| | capability necessary for their mission | success. | | |
| | Division of ARINC. He has over 30 Mr. Watt provides expertise in system and enterprise management system. | ineer of the Advanced Systems Engineering and Integration years of DoD and commercial experience in space systems. ems engineering and integration, communications systems, ms. Mr. Watt's responsibilities include conducting technology recommendations for corporate investment in research and | | |
| | to ARINC in developing strategic cor | ograms and business development, Mr. Watt provides leadership roorate programs. Mr. Watt has served on several corporate including ARINC network architecture security user group, | | |
| | system engineering training and cert | ification working group, research and development proposal | | |
| | review and evaluation team, and eng | gineering process improvement working group. | | |
| | Mr. Watt has been with ARINC for 25 | 5 years and resides in Southern California and is an ARINC | | |
| | Fellow. Before joining ARINC, Mr. W | att was a senior systems and design engineer for Rockwell's | | |
| | Collins Communications Systems Di | vision. Mr. Watt is a graduate of Clemson University with BS | | |
| | and MS degrees in Electrical and Co | omputer Engineering. Mr. Watt is a member of IEEE. | | |
| Time: | 6:00 PM Social | | | |
| | 6:30 PM Dinner | | | |
| | 7:15 PM Presentation | | | |
| Location: | Doubletree Club Hotel - Orange Co | unty Airport | | |
| | 7 Hutton Centre Drive | | | |
| | Santa Ana, CA 92707-5794 | | | |
| Cost | Member | \$27.00 | | |
| | Student Member | \$22.00 | | |
| | Non-Member | \$35.00 | | |
| | Unemployed Member | \$22.00 | | |
| | Presentation Only | Free | | |
| | Late Registration/Walk Ins | \$40.00 | | |





IEEE PES / IAS Chapter of Orange County Meeting Notification:







| Date: | May 17, 2012 | |
|--------------------|--|--|
| Topic: | Fundamentals of Motor Protection | |
| Speaker: | Suhag Patel, P.E. Industrial Electric Machinery (IEM) | |
| Time: | 6:00 PM Social - 6:30 PM. No Host Bar/Dinner - 7:30 PM Presentation | |
| Location: | The Doubletree Club Orange County Airport | |
| | 7 Hutton Centre Dr. Santa Ana, Ca. 92707 Phone: 714-751-2400 | |
| Reservation: | Steve Schinko, Eaton Corp. 25692 Patterson Place, Laguna Hills, Ca. 92653 | |
| | Tel: 909-869-8250 Fax: 800-884-5804 E-mail: steveschinko@eaton.com | |
| | Reservations for dinner should be made by the 11th | |
| | Checks must be received by the 14th | |
| | Meal Cost: \$25.00 if reservation received by deadline: \$30.00 at the door. | |
| | Student members are FREE! Program Only attendees (no cost) are also welcome. | |
| | Make checks payable to IEEE/PES and mail to: Steve Schinko (IEEE) | |
| | Please specify a dinner entree: Chicken, Fish, or Vegetarian. | |
| | A prize drawing will be made at the end of the meeting for those who have prepaid their reserva- | |
| | tion. The prize will be a free dinner at a future meeting. | |
| Abstract: | The presentation will be "Fundamentals of Motor Protection" and it will cover the protective | |
| | elements that are applied to motor protection. The presentation will discuss common failure | |
| | modes of motors and which protective elements in a relay are best suited to protect against these | |
| | failure modes. | |
| Speaker Biography: | Suhag Patel is Vice President of Sales & Engineering at Industrial Electrical Machinery (IEM). He | |
| | received a BSEE degree from the University of California, Los Angeles (UCLA) and an MSEE with | |
| | an emphasis in Power Systems from California State University, Long Beach (CSULB). Mr. Patel is | |
| | a Registered Professional Engineer in the state of California, a member of the Institute of Electrical | |
| | and Electronics Engineers (IEEE), and a Certified Power Quality Professional by the Association | |
| | of Energy Engineers (AEE). Prior to his work at IEM, Mr. Patel was an Application Engineer for | |
| | General Electric Multilin, a Regional Technical Manager for Asea Brown Boveri (ABB) and held | |
| | various engineering positions at Southern California Edison and Shell Oil Products. Mr. Patel has | |
| | authored several technical papers and serves on various working groups for the IEEE Power | |
| | System Relaying Committee. | |





FRF's Second International Paper Competition

in Honor of Professor Lotfi Zadeh and His 90th Birthday

A Distinguished Fanni Alumni — Class of 1942

The theme of this year's FRF paper competition is:

'Practical Application of Fuzzy Logic and Computing with Words'

Deadline for Application Form & Abstract Extended to: May 1, 2012

Deadline for Full Paper: July 1, 2012

Qualifications: A 4-Year college degree or higher and maximum 36 years of age by the deadline date for full paper. Other competition rules are available on the FRF website: www.FanniReunion.org

Awards:

Winner: \$1,000 cash award + plaque of recognition **Two Runner-ups:** \$100 cash award + plaque of recognition

The Fanni Reunion Foundation, Inc. (FRF) is an association of alumni, faculty, and staff of the School of Engineering (Fanni), University of Tehran. FRF is a non-profit public benefit corporation, established in the State of California. The FRF's objectives for this competition include the following:

- 1. To motivate and encourage students to produce original and noteworthy work with critical thinking that contributes to advancement of science in general and highlight practical applications of Fuzzy
- Logic. And Computing with Words in different scientific, engineering, business, medical and other domains.
- 2. To honor the achievements of Professor Lotfi Zadeh and to recognize Prof. Zadeh's 90th birthday, a distinguished Alumni of Electrical Engineering Department at Fanni, University of Tehran, Class of 1942. Professor Zadeh is the Father of Fuzzy Logic and Computing with Words.

For more information about this paper competition you can contact: contest@fannireunion.com

Note: Only extended abstracts will be published by FRF for the Second Paper Competition. The full paper will be used for ranking only.

Open House - Micro/Nano Fluidics Fundamentals Focus Center



The Micro/Nano Fluidics Fundamentals Focus Center performs fundamental micro/Nano fluidic (MF) research to develop standardized MF integration processes and device technology. Major thrusts: (1) chip-level integrated molecular analysis and (2) advanced manufacturing of MF devices. 20 leading MF professors at 12 universities together with prominent companies address commercial challenges. The objectives of the May 9 Open House is to introduce the center to individuals and companies who are interested in MF technology, who want to collaborate on projects with center faculty, who are considering MF technology for future products, and/or who are interested in joining the consortium.

IEEE members will get an in-depth look at micro/Nano fluidics through podium presentations and poster session detailing research projects on-going at the center. They will also have the opportunity to network with world-class faculty, students, researchers, and other companies in this field.

For more information: www.inrf.uci.edu/mf3.

Open House Date: May 9, 2012

Venue: California Institute for Telecommunications and Information Technology (Cal-IT2) Auditorium and Atrium (1st

floor), University of California, Irvine

http://today.uci.edu/pdf/UCI_11_map_campus.pdf RSVP to Gisela Lin <gisela@uci.edu>; 949-648-1487





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Hector J. De Los Santos IEEE Orange County Section Newsletter Editor

Professor Daniel Gajski

Electrical Engineering and Computer Science

Daniel Gajski, a leader in the areas of embedded systems, design methodologies and languages, headed the research teams that created new design concepts, methodologies, tools and languages. He was instrumental in developing formalisms such as Y-chart, and numerous algorithms for high-level synthesis, the definition of the controldata-flow-graph (CDFG) and finite-statemachine with data (FSMD), system level languages such as SpecCharts and SpecC, and design tools such as SpecSyn and Embedded-System Environment. Many of these concepts have



been adapted by academia and industry in the last 25 years.

Gajski directs the Center for Embedded Computer Systems, with a research mission to incorporate embedded systems into automotive, communications, and medical applications. He has authored over 300 papers and numerous textbooks, including Principles of Digital Design (Englewood Cliffs, NJ: Prentice Hall, 1997) that has been translated into several languages.

He holds Dipl. Ing. and M.S. degrees in electrical engineering from the University of Zagreb, Croatia, and a doctoral degree in computer and information sciences from the University of Pennsylvania, Philadelphia. He has spent 10 years on advanced design and development working for Ericsson and Univac before joining academia. After 10 years as Professor at University of Illinois at Urbana-Champaign he has joined UCI, where he presently holds The Henry Samueli Endowed Chair in Computer System Design.

Recently Dr.Gajski is preparing a digital-design-101 course to go on-line in the summer 2012. Videos are already in English, Mandarin and Spanish. Pls, look at Boolean Algebra homework for EECS31L course (VHDL course for digital design) http://www.cecs.uci.edu/~gajski/eecs31l/2012-winter-labs/2012-winter_lab1-speR5PHu.html. He believes that on-line will have huge effect on higher education.

In 1994, Daniel Gajski became an IEEE fellow for his work in VLSD, CAD tools, and system level design methodology



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The Magic of Global Connectivity

The 2012 IEEE Global Communications Conference (GLOBECOM) will be held December 3 – 7, 2012 at the Disneyland Hotel Conference Center in Anaheim, CA.

The conference will feature a comprehensive technical program including 12 Symposia and a number of Tutorials and Workshops. GLOBECOM 2012 will also include an attractive industrial and forum program including keynote speakers, various Business, Technology and Industry fora, and vendor exhibits.

Prospective authors are invited to submit original technical papers for presentation at the conference and publication in the Proceedings. Proposals for Tutorials, Workshops, and Fora are also invited. Please visit the GLOBECOM 2012 website: http://www.ieee-globecom.org/2012 for details about the conference and submission information.

If you are interested in volunteering for the conference, please contact Shelley-Grace Herman, Conference Operations Chair at s.g.herman@ieee.org.

Volunteers Needed:

At this time, we are specifically looking for a volunteer to serve as Student Affairs Coordinator.

Section Meeting on Accounting for Engineers

Mr.C.P. Krishnan's talk on Accounting for Engineers was well received by the section. His presentation file is available at the section website www.ieee.org/ocs/seminarfiles





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