

#### Welcome to the Buenaventura IEEE Section for April, 2010

April 13th A Reality Check: What's going on with Next-Gen

AESS & PON for FTTx? Frank Chang

ITT Force Protection Systems, Thousand Oaks ComSoc

6:30 reception, pizza, & networking; 7:00 presentation

April 14<sup>th</sup> **Conejo Robotics Team at FIRST Robotics Competition** 

Computer **Charles Seabury** 

> Ahmanson Science Center, Cal Lutheran University 6:30 reception, pizza, & networking; 7:00 presentation

April 21st Theory and FEA Deliver a Large, Working Slotted Array MTTS

Edmond Stanley Gillespie, Jr., Rantec Microwave Systems

Ciao Wireless, Camarillo

6:30 reception, pizza, & networking; 7:00 presentation

April 28th My Wound Won't Heal: Closed Electrical Circuits for Recalcitrant Wound Healing

**EMBS** Dr. Steven Kaye - Los Angeles Gerontology Research Group

> Ahmanson Science Center, Cal Lutheran University 6:00 reception and dinner, 7:00 p.m. presentation

We look forward to seeing you at our Speaker Events this month. Most of our events are free and open to the public, and often have dinner available. All of our events are posted on the Section calendar, available here on our site.

Please take a look at the IEEE California Public Policy & Government Activities page in the flyer – our IEEE Region has some interesting plans for interacting with State and Local government representatives, and you can be part of it.

Steve Johnson, 2010 Section Chair

#### Two Openings - Medical Device in Valencia, CA PRINCIPAL SYSTEMS DEVELOPMENT ENGINEER

Provide technical leadership of hardware & software design. BS in EE or software & 7 years experience. Specific experience with complex medical devices, project leadership, knowledge of embedded software & low power microelectronic systems.

#### **SENIOR QUALITY ENGINEER**

Experienced with quality standards for medical devices. Manufacturing and validation process support, design specifications, CAPA, supplier quality. Strong knowledge of FDA & ISO requirements. BS, 6-10 years experience in medical devices, pharma or equivalent.

Contact Pat Jacobs -- pat.jacobs@advancedpersonnelprofiles.com





#### **Buenaventura Section**





Date and Time: Tuesday, April 13, 2010

Location: ITT - Force Protection Systems, 3500 Willow Lane, Thousand Oaks, CA

**Directions:** take the Hampshire Rd. exit off Hwy 101, facility is east on the south side of 101 <a href="http://maps.yahoo.com/maps">http://maps.yahoo.com/maps</a> result?addr=3500+Willow+Lane&csz=Thousand+Oaks%2C+CA

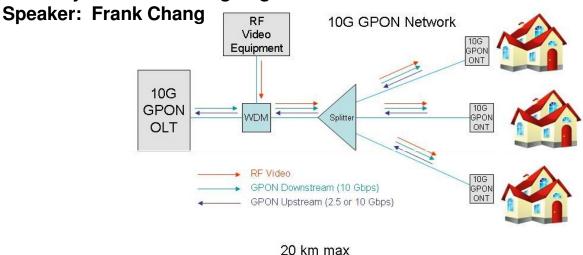
Agenda: 6:30 p.m. Reception, Pizza, & Networking

7:00 p.m. Meeting & Presentation

RSVP Requested only if you plan to attend: xwang97@yahoo.com

NOTE: The presentation takes place in a company that is involved in Government work. Therefore, please note that you will be asked for Government issued picture ID (Drivers License or better). Non-US Citizens will need to bring Right-To-Work documentation.

A Reality Check: What's going on with Next-Gen PON for FTTx?



Abstract: This talk will address the latest PON (Passive Optical Network) deployment status, standardization, trends, market & opportunity, with primary focus on 10G PON progress.

Bio: Frank Chang, Ph.D is Principal Engineer, Systems at Vitesse Semiconductors and has over 17 years of working experience in the optical networking and communication IC industry. He has been principally specializing in optical system engineering and IC product specifications and application issues for telecom, datacom, and PON access markets at Vitesse. Dr. Chang has authored or co-authored over 70 peer-reviewed journal and conference articles, and represents Vitesse to actively contribute to standard-setting bodies including OIF/ITU, IEEE 802.3ba HSSG, 802.3av 10G EPON and FSAN/ITU Q2 for the definition of various optical specifications. Previously he held various senior architectural and management positions at Cisco/Pirelli. Mahi Networks. and JDS Uniphase. Dr. Chang obtained his Ph.D. in Optoelectronics from the University of Montrea. He currently serves in the OFC/NFOEC Program Committee under Technical Subcommittee B: Network Technologies, Technical Chair for Ethernet Alliance 10G EPON Committee and the IEEE P802.3ba (formerly HSSG) 40G and 100G Ethernet Task Force organization. Dr. Chang has chaired the OFC/NFOEC technical sessions for several years in a row since 2003, and serves as the active reviewer for Optical Express, Optical Letters, Applied Optics, Journal of Optical Networking, Applied Physics Letters, IEEE Photonics Technology Letters, and Journal of the Optical Society of America B. He recently successfully organized the 40G/100G workshop on "Meeting the Need for Speed: 40G & the Road to 100G" at Asia Communications and Photonics Conference and Exhibition 2009 (ACP'09) held in Shanghai, China. Dr. Chang is Senior member of IEEE/LEOS and OSA.

# Conejo Robotics Team at FIRST Robotics Competition

Charles Seabury Wednesday, 14 April 2010



Richter Auditorium, Cal Lutheran University, Thousand Oaks (6:30-8:30pm)

Location: Richter Auditorium, Cal Lutheran University, Thousand Oaks (6:30-8:30pm)

Charles Seabury and high school students from Newbury Park, Thousand Oaks, and Westlake High show off their robots and discuss their efforts to win the FIRST Robotics Competition in 2010.

Competitive robotics has been gaining popularity nationwide as a supplement to the conventional science, math and engineering curriculum. Thousand Oaks, Newbury Park and Westlake High Schools now have competitive teams using the VEX platform, and the three schools together compete in the FIRST robotics program. We will describe the history of our program, the current activities ideas for the future as well as needs and opportunities for contributions from the engineering community. Examples of the VEX robots as well as our current FRC entry will be demonstrated.

Date Wednesday, 14 April, 2010

Location: Richter Lecture Hall. Ahmanson Science Center.

California Lutheran University

60 W. Olsen Road, Thousand Oaks, CA 91360

Parking Free parking in lot at corner of Olsen and Montclef

Time 6:30 p.m. Reception, Pizza, & Networking,

7:00 p.m. Meeting & Presentation

Contact Karl Geiger, kgeiger@computer.org,

805-876-4271, or

Craig Reinhart, reinhart@callutheran.edu,

(805) 493-3320





# MICROWAVE THEORY AND TECHNIQUES SOCIETY BUENA VENTURA SECTION





Date/ Time: Wednesday April 21st, 2010

6:30 PM Pizza & networking

7:00 PM Presentation

Location: Ciao Wireless

4000 via Pescador Camarillo, CA 93012

Speaker: Edmond Stanley Gillespie Jr.

**Rantec Microwave Systems** 

Title: Theory & FEA Deliver a Large,

Working Slotted Array



**Abstract:** The challenges and considerations in using computed mutual coupling for the design of Slotted arrays is illustrated by the design of a large (12 feet long) precision approach radar to specifications from Galileo Avionica in Italy. Galileo Avionica, with 3200 people and head office in Florence, is a leader in surveillance, protection, tracking, targeting, navigation & control and imaging systems.

There will be an emphasis on how the use of the Finite Element analysis software HFSS has generated valuable insight into the design process and brought theory and actual performance much closer together.

**Stan Gillespie** is currently the Chief Engineer at Rantec Microwave Systems in Calabasas, California. Stan has worked for Rantec since 1987, interrupted by a 1 year employment at Hughes Space and Communications (1996-1997). His responsibilities include, technical software development, mathematical analysis and design engineering. Projects include the design of waveguide slotted arrays, shaping of reflector antenna systems, design of electronically-scanned antennas for satellite acquisition, and antennas for portable radars. He is also responsible for overseeing all aspects of antenna testing, including writing automated analysis software for modern measurement systems such as the HP8510/8530 and the Flam & Russell 959. Mr. Gillespie received an MSEE (1988), an MS in Mathematics (1980), and a BA in Mathematics (1977) from California State University, Northridge. sgillespie@rantecmdm.com

## My Wound Won't Heal

### **Closed Electrical Circuits for Recalcitrant Wound Healing** Dr. Steven Kaye - Los Angeles Gerontology Research Group, **American Institute of Regeneration**

Wednesday, April 28, 2010 - 7 PM CLU - Richter Hall, Ahmanson Science Building

#### Dr. Steven Kaye

Dr. Steven Kay and L. Stephen Coles, M.D., PhD, co-founded the Gerontology Research Group in 1990 to make advances in anti-aging medicine. Currently, the Gerontology Research Group is comprised of 15 or more regular members, including researches from JPL, USC, and UCLA.

Dr. Kaye is a family physician in private practice, with clinics in the Los Angeles area.

Meeting Site: California Lutheran University.

100 Ahmanson Science Building, 60 West Olson Road, Thousand Oaks

Meetings are free, open to the public

Dinner: Available at 6 p.m. for \$10 payable at the door, no RSVP

needed. Visitor Parking is no longer permitted before 7 p.m.

on Memorial Pkwy and adjacent street without a pass.

downloadable from the EMBS web site.

Contact: Harry Croner, croner@earthlink.net

Our Sponsors: California Lutheran University, IEEE EMB

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Amgen Foundation



#### **IEEE California Public Policy & Government Activities**

Engineering and technology professionals tend to be one of the most under-represented groups in the public policy space. You are cordially invited to engage with this initiative and join the cause. Specifically, if you have existing connections with elected officials, or can commit to a few hours a month.

#### WHY

IEEE member value and representation. These are our tax dollars, and it is up to us to help determine where it should best be allocated. A poll in Orange County showed that over 20% of IEEE members wanted increased attention to Government Affairs and Public Policy.

#### **PURPOSE**

Enable policies that support the engineering & technology profession, jobs & careers, STEM (Scientific, Technology, Engineering, Mathematics) education, economic development, global competitiveness, and innovation. Facilitate access to funds from the American Recovery & Reinvestment Act, and other sources.

#### HOW

Weighing in on public policy issues involving technology, innovation, engineering & globalization - at the national, state & local government levels. Specifically by leveraging our members, IEEE-USA, and relationships with partner organizations.

- 1. Communication With our members in California on public policies that impact us.
- 2. Education Of our members and elected officials on issues pertaining to technology, workforce, and education.
- 3. Engagement With Elected representatives. "All Politics is Local". Regular contact with local representatives.

#### **DEVELOPMENTS**

There has been more significant legislation at the state government level, requiring this state level effort in addition to IEEE-USA's federal initiatives. Over the last several years we have been working with the California Governor's office, CA state senators and US Congressmen. Some of our members already work closely with their local elected officials - it is a matter of consolidating our collective networks.

#### **LEGISLATIVE ADVISORY:**

This sub-group would comprise educators and industry leaders. The idea is to provide consistent input and credible advice to elected officials in California at the federal, state and local levels.

#### THE TEAM:

Abdi Ahmed – IEEE-OC Corp Relations & NetServe Systems, Inc.

Dr. Vasudeva Atluri - Chairman, IEEE Region 6 Govt Activities

David Aviv – IEEE LAC

Don V. Black - IEEE-OC Computer Society

**Dr. Leonard Bond** – R6 Director IEEE

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Galib Samdani - Intel

R Sampath - IEEE California Public Policy; Quanta Consulting, Inc.

Art Sutton - IEEE-LAC

Dr. Suresh Vadhva - IEEE-Sacramento

Dr. Shireesh Verma – IEEE-OC Engineers-in-Transition; Conexant

#### CONTACT:

R Sampath ~ rsampath@ieee.org ~ 323-908-4306.

Chairman, IEEE Public Policy & Government Activities - Orange County & California.

The IEEE California Public Policy & Government Activities Committee is an ad hoc committee under IEEE Region 6 Government Activities. More information on Federal IEEE-USA Government Activities & Public Policy is available at www.ieeeusa.org



# **Buenaventura Section Profile**

The Buenaventura Section is one of the most active in the western United States, with over 100 speaker events in the last two years, and global recognition for our Chapters and Affinity Groups. We welcome your attendance and participation in Section events!

EMBS: Chapter of the Year 2006 and 2008

LMAG: Life Member Affinity Group of the Year 2009

## **Buenaventura Section Chapters**

**Aerospace Chapter** provides speaker events to members interested in the design, integration, test, and analysis of large, complex systems consisting of major subsystems that contain dissimilar electronic devices. Most of our members work on sensor systems (radar. Sonar, optics, and navigation), communications systems, command and control centers, avionics, space systems, military systems, digital signal processing simulators, and software development. Some members work on robotics, energy, and transportation systems

**Communication Society Chapter** a community comprised of a diverse group of industry professionals with a common interest in advancing all communications technologies.

**Computer Society Chapter** chapter's vision is to be the leading provider of technical information, community services, and personalized services to the ventura county's computing professionals.

**Electronic Devices Circuits and Systems** chapter places its interest in all aspects of the physics, engineering, theory and phenomena of electron and ion devices as well as looks at the theory, the analysis, the design (computer aided design), the practical implementation of circuits, and the application of circuit theoretic techniques to systems and to signal processing.

**Engineering in Medicine and Biology Society** chapter serving the needs of biomedical engineers in ventura county. Its leadership is striving to develop new ways to serve its members with modern information from remarkable speakers.

**Life Member Affinity Group** IEEE "Life" status is an automatic process which is based on an individual's membership record and age. The member must be at least 65 years of age and has been a member of IEEEor one of its predecessor societies such that the sum of age and years of membership equals or exceeds 100. The Buenaventura Section has the only Life Member Affinity Group in Southern California.

**Microwave Theory and Techniques Society** chapter promotes the theory and applications of RF, Microwave, Millimeter-wave, and Terahertz technologies.

**Robotics** chapter interested in both applied and theoretical issues in robotics and automation, including intelligent machines and systems used, for example, in space exploration, human services, or manufacturing, and the use of automated methods in factory, office, home, laboratory automation, transportation, and other systems to improve performance and productivity.

## How Should America Be Powered?

Congress will be trying to answer that exact question in the next few months. Ground-breaking legislation is being prepared that will define how our country generates, distributes and uses power for the next hundred years. The bill will likely cover support for solar, wind and other alternative energies, incentives for energy efficient buildings and appliances, electric vehicles, building long-distance power lines and dozens of other things that will affect IEEE members.

IEEE-USA thinks it would be nice if Legislators hear from people who actually know to generate, distribute and use electricity before casting their votes.

That means you!

All IEEE members in the United States are invited to join IEEE-USA for a day and a half-long Washington Fly-In on May 17<sup>th</sup> and 18<sup>th</sup>. The fly-in will give you a chance to discuss energy policy with your elected leaders before they vote to reshape our entire power system.

Detailed information on the Fly-In, including how to register, can be found here: <a href="http://www.ieeeusa.org/policy/energy-flyin/default.asp">http://www.ieeeusa.org/policy/energy-flyin/default.asp</a>

If you are interested in energy policy and want an opportunity to discuss policy with Congress, this is your chance. Join IEEE-USA for its 2010 Energy Fly-In on May 17<sup>th</sup> and 18<sup>th</sup>. Registration is free and IEEE-USA staff will provide you with all the material and training you will need to successfully carry your message to Capitol Hill.

Questions? Contact IEEE-USA staff Russ Harrison at <u>r.t.harrison@ieee.org</u> or Bill Williams at <u>bill.williams@ieee.org</u>.

Register today at <a href="http://www.ieeeusa.org/policy/energy-flyin/default.asp">http://www.ieeeusa.org/policy/energy-flyin/default.asp</a>

Russell T. Harrison Senior Legislative Representative - Grassroots Affairs IEEE-USA 2001 L Street, NW Washington, DC 20036(202) 530-8326

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## **Buenaventura Section IEEE Officers**

We welcome your involvement – We have several positions open!

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<sup>\*</sup> acting



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#### WWW.IEEE-BUENAVENTURA.ORG

If you need to reach individuals or companies with a technical background in Ventura County and beyond, this newsletter is an ideal vehicle. We can advertise your job openings, consulting services, or conferences and events.

Please contact Steve Johnson, sfjohnso@ieee.org

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## **Buenaventura Section IEEE Officers**

We welcome your involvement – We have several positions open!

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<sup>\*</sup> acting