


IEEE BUENAVENTURA SECTION

Welcome to the Buenaventura IEEE Section for May, 2010

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| May 11 th ComSoc | Little Known Advances in Digital Scope Technology, Glenn Broderick, Tektronix. ITT Force Protection Systems, Thousand Oaks 6:30 reception, pizza, & networking; 7:00 presentation |  |
| May 12 th Computer | Service Oriented Architecture Strategies, Richard Seroter, Author. Ahmanson Science Center, Cal Lutheran University 6:30 reception, pizza, & networking; 7:00 presentation | |
| May 19 th MTTS | Rapid Virtual Prototyping Using Optimization Techniques for 3D Electromagnetic Field Solvers, Dr. Martin Schauer, Computer Simulation Technology (CST). Ciao Wireless, Camarillo. 6:30 pizza and networking, 7:00 p.m. presentation | |
| May 26 th EMBS | Healthcare Reform – Why You Should Care Joel Kallich, Amgen. Ahmanson Science Center, Cal Lutheran University. 6:00 reception and dinner, 7:00 p.m. presentation | |
| May 27 th AES/LMAG | Robotics “After School” Outreach Program, Rich Borgioli, Real-Time Systems. Vitesse Semiconductor, Camarillo. 6:30 reception and pizza, 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.

Our Fall Dinner event topic is “Cybersecurity – From ID Theft to National Security,” and we’re lining up some terrific speakers. We hope you’ll join us!

Steve Johnson, 2010 Section Chair

Job Openings – Sr. Electrical Engineer in Sylmar, CA

Sr. Electrical Engineer: Research, develop, design & test ASICs. Design & test electronic systems supporting research, design & manufacturing of implanted retinal prosthesis at Second Sight (www.2-sight.com). MSEE, 2-10 yrs experience. CMOS mixed signal ASIC design experience and IC debug & characterization. RF, low power & medical devices a plus. Contact Pat Jacobs -- pat.jacobs@advancedpersonnelprofiles.com

MEETING NOTICE

Buenaventura Section's ComSoc Chapter

Date and Time: Tuesday, May 11, 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
http://maps.yahoo.com/maps_result?addr=3500+Willow+Lane&csz=Thousand+Oaks%2C+CA&country=us&new=1&name=&qty=

Agenda: 6:30 p.m. Reception, Pizza, & Networking 7:00 p.m. Meeting & Presentation

RSVP Requested: 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.

Little known Advances in High Speed Scope Technologies

Speaker: Glen Broderick



Over the last several years the industry has made many advances in technology to meet the changing requirements of communication engineers in high speed communications analysis, and RF, radar, electronic warfare (including Ultra Wide Band and WiMedia) development. Some of these capabilities are well known in the industry, but many have not received exposure. Some of these new technologies to be explained include:

- The use of ENOB for evaluating signal integrity and digitizing errors
- Typical A/D Errors and Error Sources
- The downside of Interleaving and RF Mixing
- The use of FIR filters for: Low Pass, High Pass, BandPass, and BandStop Filtering
- The use of FIR filters for embedding and de-embedding fixtures
- Tri-Mode Probing
- Fast Frame for extending memory depth and speeding analysis
- Integrated High Performance Logic Analysis (80ps timing)
- How Automated Event Searching can save you time
- On-board Real-Time advanced RF analysis

Bio: Glen Broderick has been in the test and measurement industry for the last 33 years. Early in his career, Glen was the leading petty officer for Electronic Maintenance and Repair for the USS Monticello. For twelve years Glen worked on radar, communications systems, nuclear instrumentation, random vibration systems, and cryptographics. He has worked for Trig-Tek, Fluke, Spirent Communications, and currently Tektronix. At Spirent he was a director of product development and was the product manager for the first Gigabit Ethernet product ever developed. He was later the Senior Director for Training and traveled nationwide and worldwide putting on training classes. Glen received an MBA from CSUF. Glen is currently the local Tektronix Account Manager.



Service Oriented Architecture Strategies

Wednesday, May 12

Richter Auditorium, Ahmanson Science Center,
California Lutheran University

Richard Seroter, software architect and author, discusses and demonstrates how to leverage Service Oriented Architecture to integrate software & business functions across companies and in the "cloud".



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@cllu.edu,
(805) 493-3320





MICROWAVE THEORY AND TECHNIQUES SOCIETY BUENA VENTURA SECTION



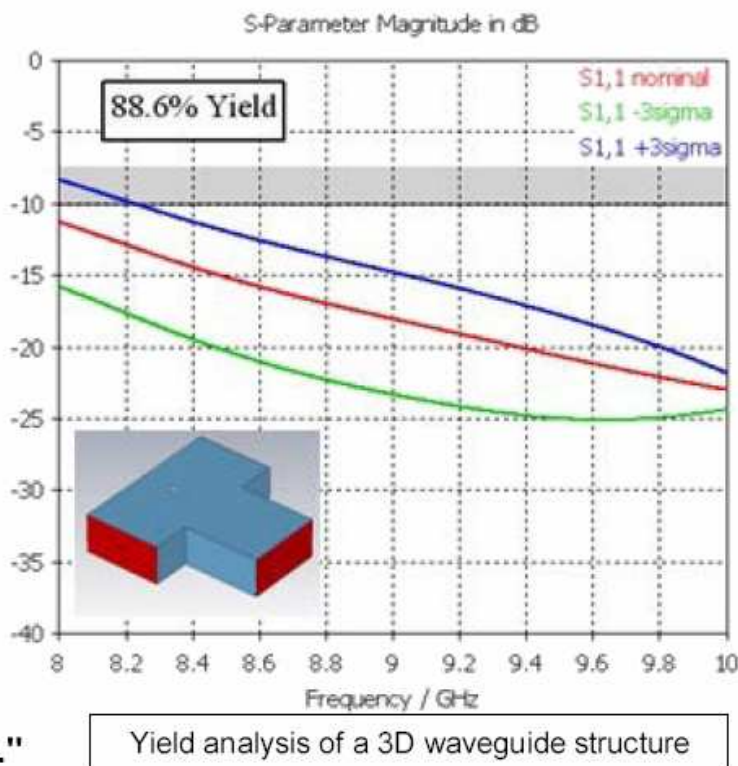
You are invited

Date/ Time: Wednesday May 19th, 2010
6:30 PM Pizza &
networking
7:00 PM Presentation

Location: Ciao Wireless
4000 via Pescador
Camarillo, CA 93012

Speaker: Dr. Martin Schauer
Computer Simulation
Technology (CST)

Title: Rapid Virtual Prototyping
Using Optimization
Techniques for 3D
Electromagnetic Field Solvers."



Abstract: Dr. Schauer will discuss the advantages of virtual prototyping using 3D EM field solvers. Major benefits are the design optimization, prediction of sensitivity of manufacturing tolerances, and yield computation. In order to perform these tasks efficiently, a sensitivity analysis and various optimization techniques are introduced. In addition to these algorithmic advantages, the use of high performance computer systems such as clusters will be reviewed. Peppering this talk will be multiple application examples including filter designs, aperture coupled patch antenna designs, power splitters, and high speed PCB and device packages.

Dr. Martin Schauer received the Dipl.-Ing. degree in Electrical Engineering from the Technische Universität Darmstadt, Germany in 1999. In the same year, he joined the Computational Electromagnetics Laboratory (TEMF) for Theory of Electromagnetic Fields, where he received his PhD in 2005.

With Computer Simulation Technology (CST) since 1999, Martin developed numerical algorithms for 3D electromagnetic simulation software until 2005. Currently he is working as an principal application engineer and technical key account manager for CST of America. His main interests are new application areas for numerical simulation methods.



MICROWAVE THEORY AND TECHNIQUES SOCIETY BUENA VENTURA SECTION



Directions to Ciao Wireless:

4000 Via Pescador
Camarillo Ca.
Phone: 805-389-3224

From LA and South

Take the I-405N.

Take the US-101/VENTURA FWY
North

Exit FLYNN RD and go straight.

Turn RIGHT onto VIA PESCADOR.
(2nd Road on RIGHT)

From Santa Barbara and North:

Take the US-101S/VENTURA FWY
towards LOS ANGELES.

Take the DAWSON DRIVE exit and
turn RIGHT from the ramp.

Turn RIGHT at the light onto
DAWSON DRIVE.

Turn LEFT at the light onto FLYNN
ROAD.

Turn RIGHT onto VIA PESCADOR.
(2nd Road on RIGHT)



Healthcare Reform - Why You Should Care!

Dr. Joel Kallich

Wednesday, May 26, 2010 - 7 PM

CLU - Richter Hall, Ahmanson Science Building

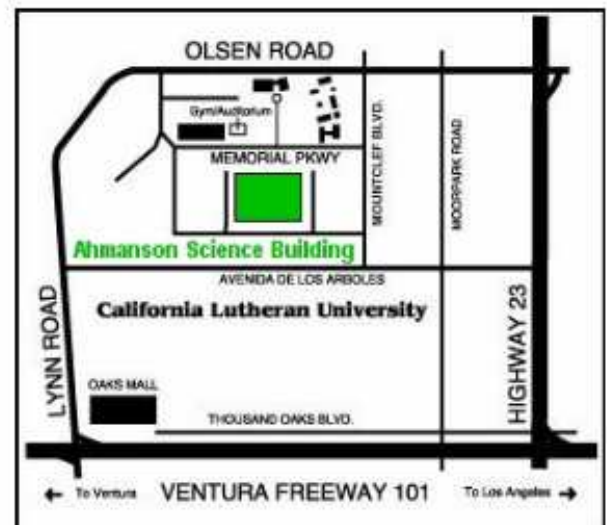


Health care reform is now the law of the land. This has broad implications for all of us – from individual healthcare recipients to medical professionals, employers, and policymakers.

Dr. Joel Kallich, Amgen

Dr. Kallich has decades of experience in healthcare economics and public policy. He is currently at Amgen, where he applies his skills to the acquisition and interpretation of patient outcomes data.

- 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.
- Parking (Changed):** In general, visitor Parking is no longer permitted
before 7 p.m. on Memorial Pkwy and adjacent
street. However, CLU Public Safety has provided
us with **parking passes** to download and use.
- Contact:** Mike Shaw, mcshaw@clunet.edu



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IEEE BUENAVENTURA SECTION
Aerospace & Electronics Systems Chapter
&
Life Members Affinity Group



**Robotics “After-School”
Outreach Program**

Date: May 27, 2010

Time: 6:30 pm Refreshments and Networking,
7:00 pm Talk

Venue: Vitesse Semiconductor Corp.
741 Calle Plano,
Camarillo, CA 93012

This talk will describe what was involved in starting a Robotics after-school program at a private school, Pinecrest Schools in Thousand Oaks, and the material developed and presented to elementary school children (Grades 3 – 5) to explore and encourage an interest in science and technology. Videos of the children operating their robots in various design challenges and competitions will be presented.

Please RSVP to Sunil Pai (paisunils@ieee.org) if you wish to attend this meeting.

Speaker: Rich Borgioli, Real Time Solutions.

Mr. Borgioli is the owner of Real Time Solutions, a technical consulting company focused on introducing applied science, technology, engineering, and math (STEM) into elementary schools. During the past year, he developed and presented an after-school program in robotics at Pinecrest Schools in Thousand Oaks, and will be expanding the operation to include a summer camp program and classes at additional Pinecrest facilities. He has previously served as a Senior Applications Engineer in the Switch Fabrics Group at Vitesse Semiconductor (2002 – 2009), and has over 30 years experience dealing with the application of DSP technology at Motorola, Blue Wave Systems, Image & Signal Processing, and CSPI.

He is a Senior Member and Life Member of the IEEE, Vice Chair of the Buena Ventura Aerospace Chapter, and holds BS and MS degrees in Electrical Engineering from Northeastern University. He has authored or co-authored a number of conference and journal papers in communications networks and signal processing, and authored a chapter in the Computer Engineering Handbook, edited by CH Chen, published by McGraw-Hill in 1992. He was recently awarded IEEE-USA PEC funding for developing the Robotics program at Pinecrest.

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
Gora Datta – IEEE-OC Govt Activities; Cal2Cal
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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



Celebrating 125 Years
of Engineering the Future

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 IEEE or 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 17th and 18th. 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:

<http://www.ieeeusa.org/policy/energy-flyin/default.asp>

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 17th and 18th. 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 r.t.harrison@ieee.org or Bill Williams at bill.williams@ieee.org.

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

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

Buenaventura Section IEEE Officers

We welcome your involvement – We have several positions open!

Section Office –2010

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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, sjohnso@ieee.org

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Vitesse- Making Next-
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