

Welcome to the Buenaventura IEEE Section for May, 2009.

We have some great speaker events this month, including a visitor from IEEE-USA, Russ Harrison, and economic policy experts from Southern California.

Our events are free and open to the public, and often have dinner available. All of these events are posted on the Section calendar, available on our site.

- May 13: Computer Leaders of the Rebellion: The RED Digital Camera
- May 12: ComSoc Methodology for the Design of Wideband, High Dynamic Range Receivers
- May 21: MTTS Carbon Nanotubes
- May 20: Section Immigration and Engineering Employment A Policy Perspective
- May 27: EMBS Development of the Dermaport
- May 28: AESS Experiences of a Navy Pilot

The Los Angeles Council of the IEEE has one of its events coming up soon:

• May 4-8: RadarCon09, in Pasadena

Our Section's annual Senior Member Advancement event will take place on September 12 at California Lutheran University. Interviewers will be on hand to review and file your application. *Potential Senior Member candidates* – watch your e-mail in May for an invitation to participate, or drop me a line.

Recent Senior Members – watch your e-mail for your opportunity to "pay it forward" by conducting the interviews for potential senior member candidates on September 12th.

Steve Johnson, 2009 Section Chair

40 year member of IEEE and recently elected a Sr. Member!

CHARLES E. RUMBAUGH

Private Dispute Resolution Arbitrator/Private Judge/Mediator/ADR Consultant Member of the AAA National Roster of Neutrals

PO Box 2636 (310) 373-1981 Rolling Hills, CA 90274 Toll Free (888) ADROffice ADROffice@rumbaugh.net http://www.rumbaugh.net Renew your IEEE Membership for 2009







MEETING NOTICE

Buenaventura Section's ComSoc Chapter

Date and Time: Tuesday, May 12, 2009

Location : ITT - FPS, 3500 Willow Lane, Thousand Oaks, CA

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

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

RSVP Requested only if you plan to attend: Victor S. Lin, victor.s.lin@aero.org

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.

Methodology for the Design of Wideband, Wide Bandwidth, High Dynamic Range Receivers

Speaker: Richard Webb



Modern receiving systems, most notably those crafted for defense application, demand one or more of: wideband frequency coverage, wide instantaneous bandwidth and high dynamic range. The design process for such systems involves many dimensions with each performance para-meter destructively dependent on the others. The talk will address a general audience with a tutorial based on a wideband design example with narrow instantaneous band-width, then include the severe implications and dramatically enhanced complexity imposed by high complexity imposed by high dynamic range, and finally expose the additional pitfalls en route to wide bandwidth. Meeting attendees will have the opportunity to contact the speaker for follow-up clarification and design discussion.

Bio: Richard Webb received B.S. and M.S. degrees in Electrical Engineering from the University of Wisconsin. His expertise in receiver, system and component engineering, and in the diverse business communities involved, has led directly to the evolution of a new family of ultra wideband (UWB) receivers and to numerous other state-of-the-art developments, man involving high dynamic range and/or ultra wide frequency coverage. Examples are modern wideband EMC and surveillance receivers; the industry standard MRI Imaging and Spectroscopy system architecture with direct excitation and nonzero I detection; and numerous ECM, ECCM and avionics configurations. Mr. Webb authored the first (SysCad) and second (Receiver Advantage) commercially available receiver and system design software offerings. In addition to his achievement in novel high frequency system design, Mr. Webb has been responsible for the creation of many subsystems, including frequency synthesizers, and a host of RF, microwave and millimeter wave components. In addition, he crafted TransCad once the most comprehensive software application for the synthesis of single and coupled TEM and non-TEM transmission topologies. Mr. Webb has authored numerous publications, including the original published work on spurious performance of multiple conversion receiving and exciting systems. He has offered major technical symposium presentations, includin the full-day Systems and Receivers Workshop, and the half-day Low Noise Amplifier Design and System Spurious Seminars Mr. Webb is the past chairman of the MTT and AP chapters of the IEEE Los Angeles Foothill Section, has served on the thesi review committee for the Marquette University Department of Electrical Engineering, and is a Registered Professiona Engineer. He holds an active DoD SECRET clearance.

IEEE Buenaventura Section

LEADERS OF THE REBELLION RED Digital Cinema Ted Schilowitz, RED Digital Cinema Wednesday May 13 at 7 p.m. CLU Ahmanson Science Building

Ted Schilowitz from **RED** Digital Cinema, will talk about RED's Ultra High Definition camera technology and the software it takes to handle 12 megapixel images at 30 frames per second.

Ted is currently part of the development team at RED Digital Cinema, the company that is taking the Digital

motion picture camera to the next level of resolution, functionality and design. With 4K and 2K acquisition, all in a revolutionary form factor, the RED ONE Camera is all about innovation, from the concept, to the radical design, to the remarkable engineering, to the breakthrough price point... everything about the RED ONE and RED Digital Cinema is about breaking the rules. The RED ONE camera is simply a new breed of tool for Cinematogra-phy. 4k resolution, Raw workflow, PL mount for use with Cinema Grade Lenses, the REDCODE Codec, and the 12 MegaPixel Mysterium sensor which RED has created specifically for the RED ONE all contribute to the remarkable advancements of this next generation 4k Digital Cinematography system.

Site	California Lutheran University, 100 Ahmanson Science Bldg, 60 West Olson Road, Thousand Oaks Meetings are free, open to the public	
Dinner	Pizza and soft drinks available at 6:30 p.m., \$5 Talk at 7 p.m.	
Parking	Visitor Parking is no longer permitted before 7 p.m. on Memorial Pkwy and adjacent street. Please Park in "G" lots or stop at the CLU Welcome Center for an on-street parking permit. Map at <u>http://www.callutheran.edu/about/campuses.php</u>	Ahmanson Science Building AVENDA DE LOS ARBOLES California Lutheran University
Contact	Craig Reinhart, reinhart@clunet.edu or Karl Geiger, <u>kgeiger@computer.org</u>	← To Ventura VENTURA FREEWAY 101 To Los Angeles →



Computer Society





CENTER FOR LEADERSHIP & VALUES

Immigration and Engineering Employment – A Policy Perspective

Mr. Russ Harrison, IEEE-USA Wednesday, May 20 6 pm - CLU Ahmanson Science Building

The IEEE is one of the largest professional organizations in the world, representing over 300,000 electrical and electronic engineers worldwide. Numerous international IEEE members attend universities in the US. Many immigrate to the US for employment in academia and industry, and some others hold outsourced jobs outside the U.S.

IEEE-USA represents IEEE members in Washington D.C. on employment and immigration policies for the United States. These naturally attract attention and controversy, especially in times of economic hardship.

Russ Harrison is the Senior Representative of IEEE's grass-roots lobbying group on Capitol Hill. He will describe IEEE-USA's stance on immigration and employment, and provide a national perspective.

Chuck Maxey is dean and professor in CLU's School of Business, and co-director of CLU's Center for Leadership and Values. **Bill Watkins** will soon be joining CLU's Center for Economic Research & Modeling. **Bruce Stenslie** will be joining us from Ventura County Economic Development Collaborative. They will provide valuable regional in-sights into this issue, and will participate with Mr. Harrison in Q&A.



All will welcome your input.

Meeting Site:	California Lutheran University 100 Ahmanson Science Building, 60 West Olson Road, Thousand Oaks	
Agenda:	 6:00 pm Networking / meet the speakers. Optional buffet-style dinner available for \$10 payable at the door, no RSVP needed. 7:00 pm Speaker event starts 8:15 pm Discussion / Q&A 	
Parking:	Please Park in "G" lots or stop at the CLU Welcome Center for an on-street parking permit. Map at <u>http://www.callutheran.edu/about/campuses.php</u>	
Contact:	Steve Johnson, sfjohnso@ieee.org	
Sponsors:	California Lutheran University Center for Leadership and Values, IEEE Professional Activities Committee for Engineers	





7:00 pm Presentation

BIOGRAPHY

Dr. Postma's research interests are nanoscience and technology in general, with an emphasis on intrinsic nanoscale materials, such as carbon nanotubes, nanowires, DNA, and graphene. He is interested in harnessing their interesting fundamental properties to realize new applications.

Dr. Postma received his PhD at Delft University of Technology in Dec 2001, working with Prof. Cees Dekker on **carbon nanotube junctions and devices**. Afterwards, he became a postdoctoral scholar at Caltech in the group of Prof. Michael Roukes, studying **dynamic range and basins of attraction of high frequency platinum nanowire NEMS resonators**. Dr. Postma then became a senior postdoctoral scholar in the group of Prof. Marc Bockrath at Caltech, studying **single-atom mass detection in carbon nanotube resonators**, **self assembly of nano circuits**, **ballistic phonon transport and nanore**

Development of the DermaPort Abram Janis

Wednesday, May 27 2009 7 PM CLU - Ahmanson Science Building

Providing reliable, infection-resistant access to a chronic kidney disease patient's vasculature has been a challenge throughout the history of dialysis. In 2005, a group of visionary leaders established Dermaport to help patients who require physically invasive therapies such as CKD to have a better quality of life. With the support of entrepreneur and philanthropist Alfred E. Mann, Dermaport was formed to develop devices that retain fixation and resist infection at the percutaneous interface of the skin.

This presentation will describe the development of the PVAS(TM) Ported Vascular Access System, a specially-designed central venous catheter coupled to a port for long-term hemodialysis.



Abram Janis DermaPort

Our

Abram Janis is the Director of Research at DermaPort. In that role, he plans and manages clinical trials and submissions to the FDA for DermaPort's medical devices. He holds a Master's in Biology from Portland State University, and has done post-graduate study at Purdue University.

Abe is the Buenaventura EMBS Chapter's Industrial Relations officer.

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



California Lutheran University, IEEE EMB Society, Alfred Mann Institute, MicroJoining Solutions, IEEE Buenaventura Section, Amgen Foundation Sponsors:

IEEE BUENAVENTURA SECTION Aerospace & Electronics Systems Chapter

Life Members Affinity Group

8



Experiences of a U.S. Navy Pilot

Date: May 28, 2009

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

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

Commander Thomas Long is the Executive Officer of VR-55, a C-130T Logistics squadron. He will be discussing his experiences throughout his 17 year career in the Navy, including flight school, shipboard helicopter operations, and C-130 operations worldwide. Commander Long was stationed in Atsugi, Japan flying SH-60B helicopters. Additionally, he was an Instructor Pilot in Pensacola, Florida and has over 4,000 flight hours flying five different types of aircaft.

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

Speaker: Commander Thomas Long, US Navy

Commander Thomas Long grew up in Bremerton, Washington. He attended the University of Southern California and graduated in 1991 with a Bachelors of Industrial and Systems Engineering. He was part of the NROTC program and upon graduation, he was commissioned as an Ensign in the U.S. Navy. He then attended Navy Flight School in Pensacola, Florida and was designated a Naval Aviator in November 1993. After initial training in the SH-60B Anti-submarine helicopter, his first fleet squadron was in Atsugi, Japan. His next assignment was VT-10 in Pensacola, FL, flying the T-34C, training future Naval Flight Officers and Air Force Navigators. During this time he earned his Masters of Aeronautical Science from Embry-Riddle Aeronautical University. After that he transitioned to C-130 transport aircraft flying with VR-53 at Andrews Air Force Base in Washington, DC, then with VR-64 in Willow Grove, PA and VR-62 in ! Brunswick, ME. There are currently five C-130 Logistics squadrons in the Navy. As a navy C-130 pilot Commander Long has flown to destinations throughout the world including over 30+ countries providing tranport of equipment, suppiles and personnel for naval requirements. He is currently the Executive Officer of VR-55, the navy's permeir C-130 logistics squadron located at Pt. Mugu, Naval Air station. He is in his 17th year of service to the country and is married with one son.



2009 IEEE Radar Conference Radar: From Science to Systems

Pasadena, California USA May 4-8, 2009

On behalf of the RadarCon09 Organizing Committee, I would like to invite and welcome you to the 2009 IEEE Radar Conference.

The 2009 conference theme, *Radar: From Science to Systems*, expands the radar technology and engineering focus of previous conferences in this series to include and emphasize scientific or observational requirements and phenomenology that engender the systems that we in the radar community develop.

Powerful uses of radar beyond detection, tracking, and imaging, in areas that are increasingly diverse in application, are evident by the fast-paced development of systems around the world. As both the user and development communities expand, advances in modeling, phenomenology, device technologies, and algorithms will be achieved and influence future radar designs.

The goal encompassed by this year's theme encourages broad representation of the radar community and its diverse user community to foster a fruitful interchange among technologists, engineers, scientists and multiple end users at the conference.

We look forward to seeing you in Pasadena!

Dr. Paul A. Rosen General Chair, RadarCon09 se s Sponsors: &IEEE JPL **Technical Sponsors:** BOEING Ravtheon NORTHROP GRUMMAN Supporters: ITT GENERAL DYNAMICS AEROSPACE dvanced Information Syste CST 2 🛒 FEKO 🚺 -ARIF&IS Euvis Exhibitors: MICRO SYSTEMS, INC. Gigatronics PA&E TELEDYNE MICROELECTRONICS Tektronix SCITECH **Tek**micro

IEEE REGION 10 STUDENT ACTIVITIES COMMITTEE IEEE 125TH ANNIVERSARY REGION 1 0 STUDENT CONGRESS 2009

The IEEE Region 10 Student Activities Committee is pleased to introduce *IEEE 125th Anniversary Region10 Student Congress, 2009*. Jointly organized by National University of Singapore and College of Engineering Chengannur, India this event is scheduled from 16th to 19th July, 2009 in Singapore.

IEEE is a non-profit organization and the world's leading professional association for the advancement of technology. There are nearly 80,000 student members in over 160 countries around the world. The Congress will be attended by around 150 students from across the world, screened from among the registrants based on their achievements, volunteerism and contribution towards the advancement of IEEE and will be aimed at sculpturing global student leaders to pioneer sustainable development.

The Main Highlights of the events are:

•World @2020 - This will be a discussion forum, where the world's most esteemed Leaders from various fields of life will be invited for an open discussion with the student community.

•Exhibition on "Technologies for Sustainable Development"

•Dignitaries Bench - The IEEE dignitaries will address the delegates and share their experience in IEEE.

The congress will also be a platform for IEEE student leaders across the world to share their experiences of successful initiatives in IEEE along with leadership training sessions and group discussions to analyze and solve multicultural issues within the IEEE student community.

See the Region 10 Student Congress 2009 Web Site at:

http://www.ieee125sc.org











2009 Buenaventura Section IEEE Officers

We welcome your involvement – We have several positions open!

Section Office

Chair Vice-Chair Treasurer Secretary Award Officer Past Chair Sr. Representative, LA Council Jr. Representative, LA Council Section Webmasters

Chapter

Aerospace ComSoc Computer EDCAS EMBS LMAG MTTS Robotics

Name

Steve Johnson Momin Quddus Zak Cohen Jerry Knotts Doug Askegard Nathalie Gosset Geoff Lenart Albert Wolfkiel Alex Lancaster Steve Johnson

Chair

Sunil Pai Mihai Pucchiu Craig Reinhart David Viveiros Mike Shaw Jerry Knotts Chuck Seabury Karl Meier

E-Mail

sfjohnso@ieee.org mominq7@yahoo.com zakc99@aol.com jeknotts@roadrunner.com dougaskegard@ieee.org gosset@usc.edu glengator2004@yahoo.com awolfkiel@ieee.org alexlancaster@ieee.org sfjohnso@ieee.org

E-Mail

paisunils@ieee.org MPuchiu@ixiacom.com reinhart@callutheran.edu david.viveiros@ieee.org mcshaw@clunet.edu jeknotts@roadrunner.com cseabury@pacbell.net karlmeier@ieee.org



Our Sponsors



Advanced Personal Profiles, Inc.



Amgen – Pioneering Science Delivers Vital Medicines



California State University Channel Islands



Institute for Electrical and Electronics Engineers



IEEE Engineering in Medicine and Biology Society



MicroJoining Solutions



Sheldon Mak

Rose Anderson

Skyworks – high performance analog and mixed signal semiconductors enabling mobile connecctivity

Sheldon Mak Rose & Anderson Intellectual Propery Attorneys





University of Southern California

Alfred Mann Insitute at

California Lutheran University



Ciao Wireless, Inc.



IEEE Communications Society



ITT – Engineered for Life



IEEE Microwave Theory and Techniques Society



Vitesse- Making Next-Generation Networks a Reality