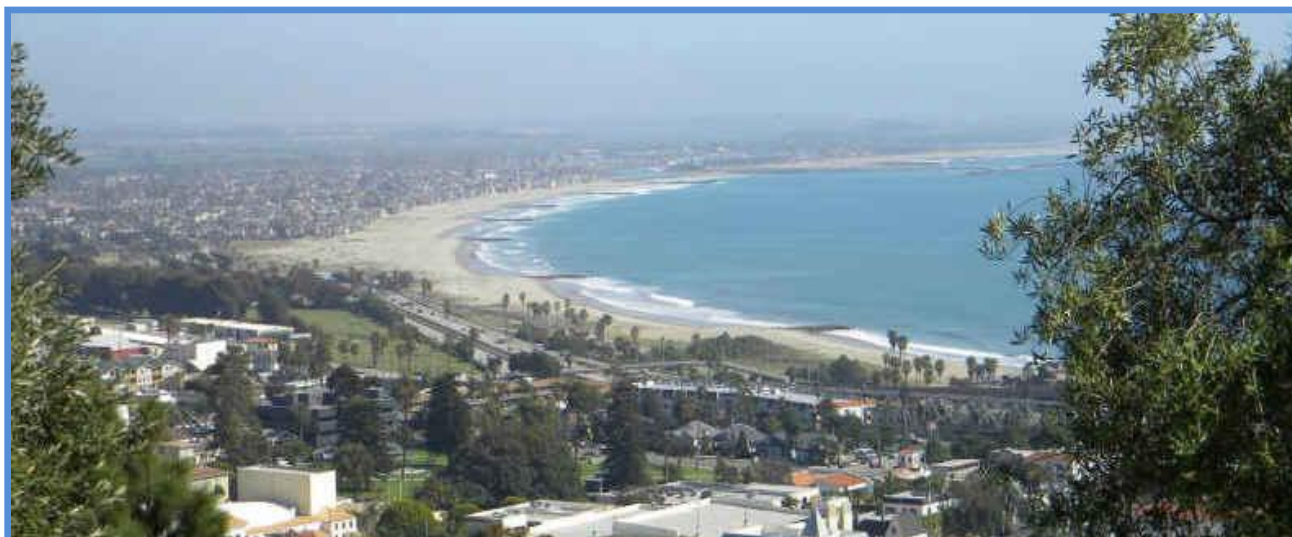




IEEE BUENAVENTURA SECTION

MAY 2014 NEWSLETTER



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Communications - comsoc.ieee-bv.org

Join Our **Facebook Page!** - facebook.com/IEEEofVenturaCounty

EVENTS

<p>Wednesday 7th May 6:30 PM- 8:00 PM</p>	<p>RAS/CAS</p>	<p style="text-align: center;">TransFormers for Extreme Environments</p> <p style="text-align: center;">Speaker: Adrian Stoica, Ph.D., Senior Research Scientist, Manager, Robotic Systems Estimation, Decision and Control, NASA Jet Propulsion Laboratory</p> <p style="text-align: center;">Location: Rm 100, Ahmanson Science Center Aud. CLU campus, 60 Olsen Road, T.O., CA</p> <p style="text-align: center;">RSVP: Doug Askegard at dougaskegard@ieee.org</p>
<p>Friday 9th May 6:00 PM- 9:00PM</p>	<p>IEEE- BV Members Mixer</p>	<p style="text-align: center;">IEEE-BV Enigma Code Day Mixer</p> <p style="text-align: center;">Where: Los Robles Greens Golf Course</p> <p style="text-align: center;">Cost: Free</p> <p style="text-align: center;">Signup at: https://www.eventbrite.com/e/ieee-bv-mixer-enigma-code-day-tickets-11386420089</p>
<p>Wednesday 14th May 6:30 PM- 8:00PM</p>	<p>Computer Society</p>	<p style="text-align: center;">FIRST Robotics</p> <p style="text-align: center;">Newbury Park High School Robotics Team</p> <p style="text-align: center;">Where/When/Details: Richter Auditorium, Ahmanson Science Center, California Lutheran University. Register: https://meetings.vtools.ieee.org/meeting_view/list_meeting/25985</p>
<p>Wednesday 21st May 6:30 PM- 8:00 PM</p>	<p>AESS/EDC AS/MTTS/L MAG</p>	<p style="text-align: center;">2D Electronics: Graphene and Beyond</p> <p style="text-align: center;">Presenter : Dr. Kaustav Banerjee</p> <p style="text-align: center;">University of California, Santa Barbara (UCSB)</p> <p style="text-align: center;"><u>Location</u> : Ciao Wireless, 4000 Via Pescador, Camarillo, CA 93012</p>
<p>Wed 28th May 7 PM</p>	<p>EMBS</p>	<p style="text-align: center;">Protecting the Operating Room Doctor, Nurse, and Patient – Innovation can make a difference</p> <p style="text-align: center;">Adam Weintraub, Director, Healthcare Safety Devices, Medical Solutions Global Business Unit, Ansell, Inc. Location: CLU - Ahmanson Science Building</p>
<p>Monday 19th May 6:30 PM</p>	<p>OpCom</p>	<p style="text-align: center;">Operating Committee Meeting</p> <p style="text-align: center;">6:30 pm</p> <p style="text-align: center;">China Buffet, Thousand Oaks</p>
<p>Monday 25th August 11:00 AM</p>	<p>Upcoming Special Event!</p>	<p style="text-align: center;">IEEE Buenaventura presents “Fairways to Scholarships”</p> <p style="text-align: center;">Monday August 25 2014 Los Robles Greens Golf course Shotgun start at 1PM, Registration begins at 11:00 AM</p> <p style="text-align: center;">Contact Mike Nicholls mnicholls@a-m-c.com</p>

Membership News

Hi Everyone!

Please join me in welcoming our latest members to the IEEE:

- ✚ Iradj Shahriary
- ✚ John Maxwell
- ✚ Michael Laverty
- ✚ Sami Alharthi
- ✚ Sandra Suttiratana
- ✚ Sarah Suttiratana
- ✚ Sultan Alenezi
- ✚ Zoe Hay



Members: please be sure to update and share your information at the IEEE Member Portal and set up your IEEE email alias. Please also introduce yourselves at meetings; networking starts here in the IEEE.

**--- Bridge Carney
IEEE Buenaventura Section Chair 2014**

Computer Society

The Computer Society Chapter is seeking new volunteers for officers and presentations. Please contact Craig Reinhart, CS Chapter Chair to volunteer or to speak at an upcoming meeting.

**-- Craig Reinhart
CS Chair
craig@ieee-bv-cs.org**

SECTION NEWS

1. IEEE Buenaventura Life Members Affinity Group Honored

Congratulations to the IEEE Buenaventura Section Life Members Affinity Group for being included on the 2014 list of Outstanding Life Members Affinity Groups, for the fifth year in a row. The award letter is below. For more information, see the [IEEE Life Members](#) page.

Dear Jerry Knotts,

On behalf of the IEEE Life Members Committee, I am pleased to formally advise you that the **IEEE Buenaventura Section Life Members Affinity Group** has been included on the 2014 list of Outstanding Life Members Affinity Groups.

The IEEE Life Members Committee believes that keeping Life Members active and engaged is a key component to the success of IEEE in local IEEE activities. Having a Life Members Affinity Group is an effective method in keeping Life Members active, and the Life Members Committee would like to thank you and the additional people within your Section for your efforts.

The recipients were identified based on 2013 calendar year activities – the number of Life Members events held, the average attendance at those events, and the number of contributors to the IEEE Life Members Fund. It is hoped that this recognition will lead to an increase in the following areas:

- Satisfaction of IEEE Life Members with their IEEE involvement
- Recognition of the contributions of Life Members to IEEE activities
- Number of Life Members Affinity Groups
- Life Members engagement in IEEE activities
- Donations to the Life Members Fund
-

The complete list of Outstanding Life Members Affinity Groups is contained in the June 2014 issue of the IEEE Life Members Newsletter. Future issues will highlight specific activities of Outstanding Life Members Affinity Groups. Please e-mail life-members@ieee.org if you would like the activities of your Group highlighted.

Once again, I would like to thank everybody in the IEEE Buenaventura Section who has been involved in conducting Life Members Affinity Group activities for their efforts. Your contribution to IEEE and IEEE Life Members is greatly appreciated.

Sincerely,

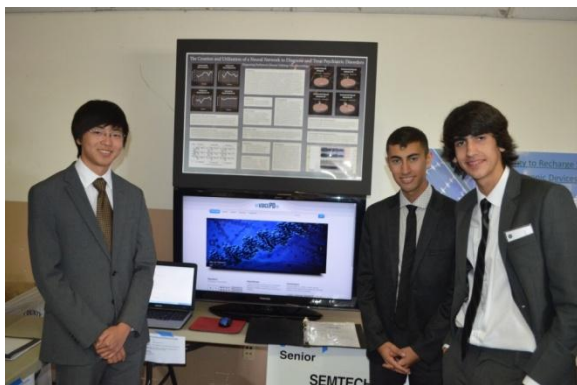
Jose B Cruz
Chair, IEEE Life Members Committee

2. IEEE BV Section Gives Special Awards at Ventura County Science Fair 2014



VCSF Awards Ceremony 2014- From right Doug Askegard (IEEE), Sarah Kazmie (1st Place), Dhruv Aggarwal (3rd), Benjamin Ormond (4th), Eric Zhou (2nd) & Brandon Belkopia (2nd)..

Ventura County Science Fair was held in the Ventura County Fair Grounds with the organization of VC Office of Education. VCOE celebrated the 60th anniversary of this premier annual event. Students from numerous Middle and High Schools of Ventura County displayed their Science Projects in fourteen different categories. In addition to awards given by VCOE, special Awards are given by professional organization and industries to exceptional projects. IEEE Buena Ventura Section participated in this special awards category. IEEE BV section would like to thank, Doug Askegard (IEEE), Chuck Seabury (IEEE), Christian Ziegler (IEEE) & Momin Quddus (IEEE) for judging in the special awards category and Bridge Carney for announcing the awards at the Ceremony



STEM Exposition, 2014



In addition VCSF, Channel Island State University organized a STEM Expo, (Science Technology Engineering & Math) at the Science Fair. Educational Institutions, Business's, non profit organization, government and professional organizations participated in this event. IEEE BV section participated in this event . Science & technology questions were posed to small groups of students. Interesting question like 'How to deflect a Earth threatening meteorite' were posed . Students with correct answers won prizes. Students were very engaged and welcomed the challenge of solving science questions.



3. IEEE Region 6 Southern Area Meeting Gathers IEEE Student Branch Leaders, Directors, and Section Leaders on the UCLA Campus for Planning and Competitions - PR.com

Region 6 Director, Mike Andrew and his team listened to our recommendations to make IEEE successful in our region. A MicroMouse competition and student design presentation competition with IEEE Student Branches of our Area was also organized. Please read more at: <http://www.pr.com/press-release/556225>

JOB OPPORTUNITIES



Contact Pat Jacobs -- 805-579-0630 pat.jacobs@advancedpersonnelprofiles.com →

✚ ASIC MANAGER

Manage staff of 3 for next generation ASIC development. 9-80 schedule, great benefits and people.

✚ 3 Quality Engineers needed at Second Sight, Sylmar

Experienced Quality Engineers with medical device experience. Positions focused on quality systems, CAPA/ETQ and Principal Engineer.

✚ Product Managers – Commercial Strategy, Bioness (www.bioness.com), Valencia

Strategic medical device product management. Travel is required and must be experienced with medical devices.

✚ Regulatory Affairs Specialist

Bioness (www.bioness.com), Valencia
Experience with IDEs, PMAs, 501(k)s, FDA and foreign regulatory submission.

✚ Financial Analyst: Bioness (www.bioness.com), Valencia

Accounting experience for providing financial planning and analysis. 3-5 years experience.

Contact: Abby Hairabedian 805-388-1711 ext. 332 ahairabedian@dex.com →

✚ CONTRACT ELECTRICAL ENGINEER

Camarillo company looking for an Engineer to successfully complete tooling projects for electronic assemblies such as wind turbine control systems and computer networks used in the medical equipment industry. Will be paid upon successful completion of projects. Good knowledge of high-power RF.



Looking for Academic, Scientific, or Engineering Talent?

Advertise with the IEEE Buena Ventura Section Placement ads are \$25/month and appear in both newsletter and online. Sponsorships available for website and Section. Contact newsletter@ieee-bv.org or see our [Ad Placement information](#) to advertise or sponsor the Section.



IEEE life members
Buenaventura Chapters

TransFormers for Extreme Environments

Speaker: Adrian Stoica, Ph.D., Senior Research Scientist, Manager, Robotic Systems Estimation, Decision and Control, NASA Jet Propulsion Laboratory

Date: Wednesday, May 7, 2014

Time: 6:30 pm pizza meet & greet; 7:00 pm Talk

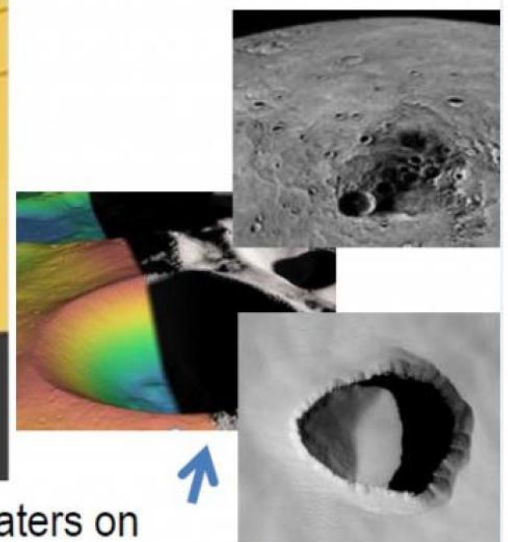
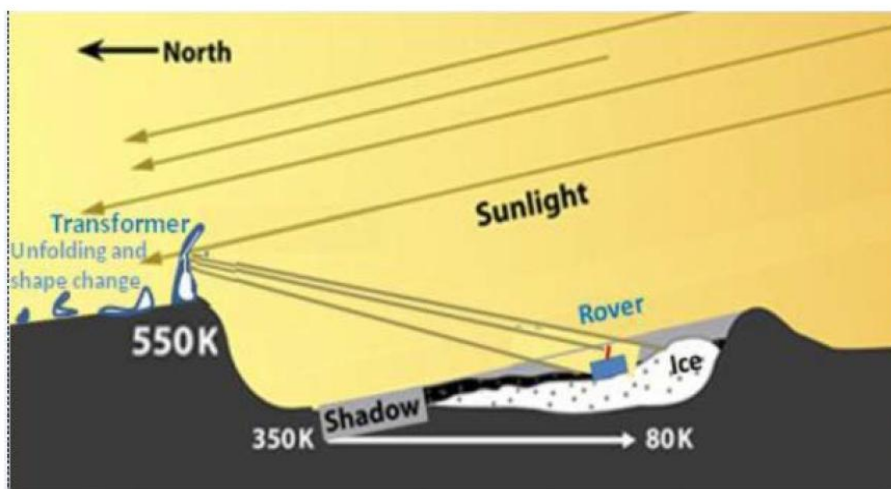
Location: Rm 100, Ahmanson Science Center Aud.

CLU campus, 60 Olsen Road, T.O., CA

RSVP: Doug Askegard at dougaskegard@ieee.org



Talk Description: Imagine a revolutionary way to remotely control the environment surrounding one or more roving vehicles exploring remote and unexplored areas of the Solar System, such as the dark interiors of craters or the depths of caves on Mars, the Moon, or Mercury. We call our solution “TransFormers” - multifunctional platforms that can change their shape and function and can enable new classes of in-situ planetary missions at massively reduced cost. Unfolding to large areas, they can reflect solar energy, warming and illuminating targets, powering solar panels, tracking movement and acting as a telecommunications relay.



Permanently shadowed areas, cold and dark: Craters on Mercury and the Moon (synthetic view of Shackleton), cave on Mars

Placed on the sunny rim of a permanently-shadowed crater, or at the entrance to a cave, TransFormers can be used in conjunction with rover exploration, projecting a favorable micro-environment into cold and dark areas. These challenging sites are particularly



IEEE life members Buenaventura Chapters

exciting and scientifically interesting. For example, water found in the permanently shadowed areas of craters on the Moon or Mercury can reveal clues about planetary formation and history, and could be used as a resource for astronauts. Cave exploration on Mars offers the possibility of finding extraterrestrial life; furthermore, caves are time capsules preserving geochemical traces and may safely shelter future human explorers. TransFormers present an innovative and highly adaptable way of improving survivability in such extreme environments. Our concept will enable unprecedented science and exploration of sites identified as a promising future direction for investigation in the most recent Planetary Decadal Survey.

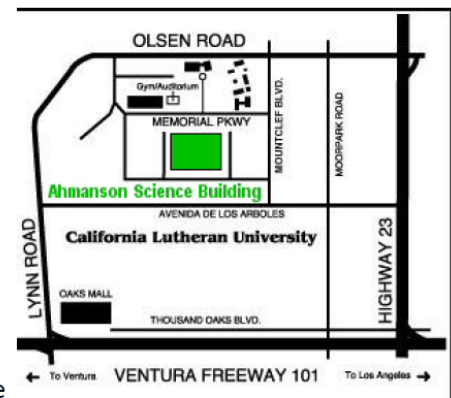
Adrian Stoica, Ph.D. has over twenty years of R&D experience in autonomous systems, developing novel adaptive, learning and evolvable hardware techniques and embedding them into electronics and intelligent information systems, for applications ranging from measurement equipment to space avionics to robotics. He has been working at NASA JPL since 1996 leading a variety of research projects for NASA, DARPA, USAF, DTAO, BMDO, etc., and developing new technology solutions in areas ranging from evolvable hardware for survivable systems to humanoid robots for planetary surface operations. He became a Principal in 2002, a Senior Research Scientist in 2007, and Group Supervisor in 2008. Dr. Stoica contributed pioneering work in new fields (humanoid learning by imitation, evolvable hardware, survivable self-reconfigurable electronics for extreme environments), invented new concepts (polymorphic electronics, cognitive anti-tamper techniques) and took them to hardware demonstration. He has earned recognized authority in adaptive and evolvable hardware and published more than 100 papers and has been granted 5 awarded patents. Dr. Stoica has founded several conferences (including the NASA/ESA conference on Adaptive Hardware and Systems). He has played various roles in IEEE (Program Chair 2011 IEEE Systems Man and Cybernetics, etc.), plenary speaker at more than 10 international conferences.

Adrian Stoica is a visiting Professor at the University of Edinburgh since 2004 (prior academic involvements include Assistant Professor University of Iasi, Romania, 1991-1992, Adjunct Professor University of Queensland, Australia, 2003-2006). He is a member of various advisory and review boards for US government agencies, Canada, UK, Norway and European Commission. He also was part of the European Commissions ISTAG Working Group on Future and Emerging Technologies (FET), which provided strategic advice and orientations on long term foundational research in the area of Information and Communication Technology.

Adrian Stoica earned a PhD, Electrical Engineering from Victoria University of Technology, Melbourne, Australia, 1996, (Thesis in robot learning: "Motion learning by robot apprentices- a fuzzy neural approach"), a MS in Electrical Engineering from the Technical University of Iasi, Romania, 1986.

Parking: Do not park in the faculty/staff lots. Free parking is available in the [visitor lot](#) at the corner of Olsen Road and Mountclef Boulevard.

Alternatively, CLU Public Safety has provided us with [parking passes](#) for on street parking.



It's FREE, it's FOOD, it's FUN!

Come join your fellow Engineers of IEEE



IEEE-BV Enigma Code Day Mixer

When: May 9th 6:00 to 9:00 PM

Where: Los Robles Greens Golf Course

Cost: Free

Signup at: <https://www.eventbrite.com/e/ieee-bv-mixer-enigma-code-day-tickets-11386420089>

These are always some of best attended events! No cost and great place to relax and hear what our fellow members are doing in the cross section of engineers from the great technology companies we have in Ventura County! Food and beverages are complimentary. Smiles are also free!

If you know of someone who is not an IEEE member, bring or invite them to come along.

See you there!

Computer Society

FIRST Robotics Newbury Park High School Robotics Team



On Wednesday, 14 May 2014, the Newbury Park High School Robotics Club returns to discuss their recent participation in the Los Angeles Regional FIRST Robotics Competition.

FIRST is the largest national robotics competitions of its kind at the high school level. Students have only six weeks to design, build, program, and test a robot to perform against a field of competitors. The game, the rules and the robot specifications are different every year. This year, the game was Aerial Assist. Aerial Assist is played by two competing alliances of three robots each on a flat 25' x 54' foot field, straddled by a truss suspended just over five feet above the floor. The objective is to score as many balls in goals as possible during a 2.5 minute match.

In this competition, students get to:

Work alongside mentors who volunteer their time and talents to guide each team.

Build and compete with a robot of their own design.

Learn and use sophisticated software and hardware.

Compete and cooperate in alliances and tournaments.

Earn a chance to compete in the World Championship.

Qualify for over \$19 million in college scholarships.

We will hear a short presentation in the lecture hall, followed (weather permitting) by an extended demonstration and Q&A outside. This is an excellent opportunity to get kids interested in science and engineering.

The presentation is free and open to the public.

Where/When/Details:

Richter Auditorium, Ahmanson Science Center, California Lutheran University

Wednesday, May 14

Pizza and networking: 6:30 PM

Presentation, Q&A: 7:00 PM

Maps and parking instructions: <http://www.ieee-bv-cs.org/meetings/>

Please register to attend:

https://meetings.vtools.ieee.org/meeting_view/list_meeting/25985



MEETING NOTICE Buenaventura AESS/EDCAS/MTTS/LMAG Chapter Meeting

Date and Time: Wednesday, May 21st, 2014 (6:30PM)

Location : Ciao Wireless

4000 Via Pescador, Camarillo, CA 93012

Agenda: 6:30PM Reception & Networking;
7PM Presentation

2D Electronics: Graphene and Beyond

Presenter : Dr. Kaustav Banerjee

University of California, Santa Barbara (UCSB)

Abstract : Graphene – composed of a single layer of carbon atoms arranged in a hexagonal pattern, is the basic material for the family of low-dimensional allotropes of carbon known as carbon nanomaterials. These graphene based nanomaterials have extraordinary physical properties that can be exploited for their exciting prospects for a variety of applications. This talk will highlight and discuss the unique prospects of graphene based nanomaterials for designing next generation low-power, low-loss and ultra energy-efficient active and passive devices targeted for designing next-generation “green electronics”. The discovery of Graphene has also opened up a new era for a wide range of 2D nanomaterials and their unprecedented electronic applications. This talk will also provide a brief overview of such materials and related opportunities and challenges, especially in the electronics domain .



Bio: Kaustav Banerjee is Professor of Electrical and Computer Engineering and Director of the Nanoelectronics Research Lab at the University of California, Santa Barbara (UCSB). Initially trained as a physicist, he received the Ph.D. degree in Electrical Engineering and Computer Sciences from the University of California, Berkeley, in 1999. Prior to joining the UCSB Faculty in 2002, he was a Research Associate at the Center for Integrated Systems in Stanford University during 1999-2001. His current research interests involve exploration of the physics, technology and applications of low-dimensional nanomaterials for next-generation green electronics, photonics and bioelectronics.

Prof. Banerjee's ideas and innovations chronicled in over 275 publications (with h-index of 47) have not only received thousands of citations but also have played a decisive role in steering worldwide research. His technical contributions have been recognized with numerous awards and honors. He was elected a Fellow of IEEE in Fall 2011, and has served as a Distinguished Lecturer of the IEEE Electron Devices Society since 2008. Prof. Banerjee is one of five engineers worldwide to receive the Friedrich Wilhelm Bessel Research Award from Alexander von Humboldt Foundation, Germany, in 2011 for his outstanding contributions in nanoelectronics. His work on 2D materials has been recognized with a JSPS Invitation Fellowship in 2014 by the Japan Society for the Promotion of Science. More information about him and his research can be found at: <http://nrl.ece.ucsb.edu/>.



Protecting the Operating Room Doctor, Nurse, and Patient – Innovation can make a difference

**Adam Weintraub, Director, Healthcare Safety Devices,
Medical Solutions Global Business Unit, Ansell, Inc.**

**Wednesday, May 28 2014 7 PM, CLU -
Ahmanson Science Building**



As healthcare reform continues to be widely discussed, healthcare quality and safety is gaining increased attention. We are already seeing this take shape nationally, where Medicare has implemented its “pay for performance” policy with hospitals, targeting quality and readmission rates. This policy, in particular, focuses largely on surgical processes and outcomes. As such, this has increased the attention on patient and healthcare worker safety in the perioperative setting.


The operating room is a complex environment where the medical team is focused on performing a surgery that will restore the patient to health. In this setting, surgeons, anesthesiologists, nurses, surgical technologists, and patients are faced with numerous challenges and risks on a daily basis. Injuries and infections can have significant consequences unless preventive measures are taken.

While awareness and protection against these risks are improving through education, we still face many serious, preventable events (also known as “never events”) today, such as wrong-site surgeries, retained surgical items, and surgical site infections. Fortunately, innovation is helping to mitigate against these risks. Technology can play an important role in protecting both the patient and the clinical team by helping to reduce the incidence of these events. This talk will describe some of the current risks that exist in perioperative settings today, how innovation is helping to improve healthcare worker and patient safety, and some opportunities to enhance healthcare safety even further in the future.

Adam Weintraub

Adam Weintraub is the Director of Ansell's Healthcare Safety Devices business, a segment that provides solutions to help protect patients and healthcare workers from injuries and healthcare associated infections. By partnering with healthcare providers to identify and provide solutions to unsolved safety challenges, Ansell continues to enhance

the standard of care in healthcare protection. In his position, Adam oversees global commercialization and operations for this business segment. He joined Ansell in 2012. Prior to joining Ansell, Adam held several global product management positions at Medtronic Diabetes. Before Medtronic, he worked at Campbell Alliance, a healthcare management consulting firm, and at Johnson & Johnson. Adam earned a bachelor's degree from the University of California, Los Angeles and an MBA from Duke University's Fuqua School of Business.

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:	In general, visitor Parking is no longer permitted before 7 p.m. on Memorial Parkway and adjacent street. However, CLU Public Safety has provided us with parking passes to download and use.	
Contact:	Steve Johnson, sfjohnso@ieee.org	
Our Sponsors:	California Lutheran University, IEEE EMB Society, Alfred Mann Institute, MicroJoining Solutions, IEEE Buenaventura Section, Amgen Foundation	



IEEE Buena Ventura presents “Fairways to Scholarships”
***Bringing together Ventura County Hi-Tech Corridor Industry to support
the future Engineers of America.***

Monday August 25 2014 Los Robles Greens Golf course Shotgun start at
1PM, Registration begins at 11:00 AM

Contact Mike Nicholls mnicholls@a-m-c.com

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Tournament Partners Package (\$1000)

- Tournament fees for a Foursome of golfers.
- Golf hole sponsorship, to include your firm's sign on a tee box.
- Public recognition at the lunch following the tournament.
- Special recognition in the advertising used to promote the tournament

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Tournament Sponsors Package (\$750)

- Tournament fees for a Foursome of golfers.
- Golf hole sponsorship, to include your firm's sign on a tee box
- Public recognition at the lunch following the tournament.

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Super Donor Package (\$500)

- Tournament fees for a Foursome of golfers.
- Public recognition at the lunch following the tournament.

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Golf Hole Sponsor Package (\$100)

- Golf hole sponsorship, to include your firm's sign on a tee box

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Tournament Registration (\$99 per person)

- Includes 18 holes, golf cart, breakfast, lunch, and chances to win great prizes!

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Straight Donation (Any amount appreciated)

- Public recognition at the lunch following the tournament.



IEEE BUENAVENTURA SECTION

Buenaventura Section and Chapter Info

Section Office 2012

	<u>Name</u>	<u>E-Mail</u>
Chair	Bridgeman Carney	bcarney@ieee-bv.org
Vice-Chair	Albert Wolfkiel	awolfkiel@ieee-bv.org
Treasurer	Zak Cohen	zcohen@ieee.org
Secretary	Karl Geiger	karl@ieee-bv.org
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Awards Chair , Member Development PACE Events Chair	Christian Ziegler	awards@ieee-bv.org
Historian	Doug Askegard	dougaskegard@ieee.org
Past Chair	Karl Geiger	karl@ieee-bv.org
Sr. Representative, LA Council	Bridgeman Carney	bcarney@ieee-bv.org
Representative, LA Council	John Wright	j.wright@ieee.org
Section Webmaster	Karl Geiger	webmaster@ieee-bv.org
Newsletter	Zak Cohen Karl Geiger Gaurav Mahajan	newsletter@ieee-bv.org

<u>Chapter</u>	<u>2013 Chair</u>	<u>E-Mail</u>
Aerospace	Momin Quddus	mominq7@yahoo.com
Communications	David Pehlke	chair@comsoc.ieee-bv.org
Computer	Craig Reinhart	reinhart@callutheran.edu
Electron Dev./Circuits and Systems	Sunil Pai	chair@edcas.ieee-bv.org
Engineering in Medicine and Biology	Bob Rumer	chair@embs.ieee-bv.org
Life Members Affinity Group	Jerry Knotts	chair@lmag.ieee-bv.org
Microwave Technology and Techniques	Tom Campbell	chair@mtts.ieee-bv.org
Power and Energy	Bridge Carney	bcarney@ieee-bv.org
Robotics, Automation & Industry Applications	Doug Askegard	rumer@callutheran.edu

Also be sure to check the Section's websites for the latest updates:

http://www.ieee-bv.org/	Aerospace, ED/CAS, Life Members, Microwave, Power and Energy, Robotics, Section
http://comsoc.ieee-bv.org/	Communications
http://www.ieee-bv-cs.org/	Computer