



2016 Region 6 Awards Program

Categories, Descriptions, Nomination Suggestions, with Real Examples of Previous Winners

Very Important General Instructions for writing all Nominations in all Award Categories

Be very thorough because if this Nominee wins this award at your Section level, it will be passed up first to the Area awards level and then perhaps to the Region level. Keep in mind there will be many awards committee people reading this nomination form who probably do not know the Nominee and they may be more than 1000 miles away. They are depending solely on your nomination form to evaluate this particular Nominee for this award.

Award Categories for Organizational Units

There are six possible awards for OUs. They are:

Outstanding Chapter (includes Councils and Affinity Groups)

Outstanding Small Student Branch (<26 active members as of April 30, 2016)

Outstanding Large Student Branch (26 or more active members as of April 30, 2016)

Outstanding Small Section (<501 active members as of April 30, 2016)

Outstanding Large Section (501 or more active members as of April 30, 2016)

Outstanding other type of OU

Outstanding Chapter

To honor an outstanding Chapter, Council, or Affinity Group each year. Extraordinary performance greatly benefits the members of your Section. It attracts non-members to attend its meetings and events and encourages them to join the IEEE and that Society. It benefits industry and society in general by providing leading edge educational programs.



There are many good Chapters but only a few outstanding ones. We want to motivate Chapters, Councils, and Affinity Groups to strive to be outstanding. Therefore the bar for this award is high. The following list is the requirements to apply for this award:

1. A minimum of 8 meetings per year.
2. A webpage that is updated at least monthly so all information is correct and up to date.
3. A growing membership. It does not matter if there are 15 members or 1000. What matters is that it is growing, and not shrinking.
4. A positive balance in their bank account. It does not matter if it is \$250 or \$50,000 as long as they have enough to sustain all of their expenses and meetings on their own without asking the Section for financial aid.
5. A high quality annual report to our Section Excom.
6. There should be an active effort to invite and engage university students in the technical area of the Chapter and this shall be documented.
7. Organizing an annual conference or educational day is a plus.
8. Filing of their meeting reports and financials with the Section and IEEE by or before the deadline, completely, and accurately.
9. If a Chapter wins this award at the Section level, they must wait a year before applying again.

Nomination and Operational Suggestions

The best Chapters have an active liaison program with industry. They attract both audience participation from those companies and they attract knowledgeable speakers for lectures and panels. Some chapters get companies to sponsor their food in exchange for a table at the meetings where the company can show their products. Some Chapters, Councils, or Affinity Groups even obtain financial grants to their organizations. This can help fund conferences and workshops.

Examples of Prior Winners

2012 Outstanding Chapter: Computer Society

Supporting information:

- Approximately 10 technical meetings per year
- attended by large group of visitors (commonly 80-150 people)
- Sponsor of annual Electronic Design Process Symposium, a well recognized one-day symposium on the EDA industry. Number of attendees around 50, many of whom are movers and shakers in the industry
- Co-sponsor of annual New Frontiers in Computing conference, a highly regarded one day conference with changing themes -An enthusiastic group of volunteers who make this happen, with ample opportunity for individuals to grow and network with leaders in the industry




CS Chapter Report 2012

2012 Officers:
Chair – Hans Spanjaart
Vice Chair – Senthil Krishnamoorthy
Treasurer – Ram Misra
Secretary – Gurmeet Singh

- **Chapter Webpage:**
 - **URL:** <http://sites.ieee.org/scv-cs/>
 - **Contents**
 - All upcoming and past events
 - Links to IEEE, IEEE CS, e-GRID
 - Etc, etc

Filename: SCV-CS-AnnChapReport-2012-02R0

Publicity	Pat Fasang
Publicity backup	Open
Webmaster	Gurmeet Singh
Webmaster backup	Kevin Cameron, Raj Sankaranarayan, Dennis Cater
Professional Networking	Pat Fasang
Professional Networking backup	Open
Registration Desk	Nancy Wassom
NFIC Chair/Liason	Mineo Yamakawa
NFIC Chair/Liason backup	Steve Ganz, Slava Mach
Chair emeritus	John Swan
Section advisor	Dick Ahrons
EDPS Chair/Liason	John Swan
HotChips Liason	Slava Mach
IEEE Stanford/Liason	Yoo-Yoo Yeh
ACM Liason	Steve Ganz



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
Santa Clara Valley Section

IEEE SCV-CS

Archives, etc

Important links

Upcoming events

About us

Access to on-demand web cast

IEEE SCV-CS

Upcoming events

About

Contact

TechTalks 2011

Other archives

Creating System-On-Chips: Mixing HW & SW Successfully

Creating System-On-Chips: Mixing HW & SW Successfully

Date: Tuesday, March 13, 2012

Time: 6:30 PM (PST) Networking/Refreshments, 7:00 PM Presentation

Speakers: Stuart Swan, Senior Architect Systems Solutions Group, Cadence

Registration: Please register in advance at the bottom of this page

Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Abstract:

The scale and complexity of chip design has exploded in the last twenty years. Starting with a brief review of the hardware design and verification techniques used over the last four decades, the presentation will explore how chips have evolved into System on Chips (SoCs), and will explore the emergence of new design and verification techniques to tackle the complexity of today's SoCs, which frequently include multiple processors, embedded software, and complex communication protocols. We will then explore some new design and verification techniques for SoCs that are likely to become prevalent in the near future.

Speaker bio:

Stuart Swan is a Senior Architect in the Systems Solutions Group at Cadence Design Systems, and has over twenty years of experience in the EDA industry. Mr. Swan helped enable a number of new EDA tools at Cadence and has worked directly with SoC designers of large customers around the world to help them adopt new tools and methodologies. In the area of SoC modeling standards, he helped lead development of System-C and authored a book, served in the OSCI systems board of directors, and was technical working group chairman for the IEEE System-C LAM development. He has also been active in the development and standardization of the SystemVerilog QVM and UVM verification methodologies. Stuart graduated from Stanford University with a BSEE with honors.

Thanks to those sponsoring part of our pizza this meeting:

- Altera, <http://www.altera.com>

Ticket Information

Powered by

TYPE	ENDS	QUANTITY
Live Event	Mar 13, 2012	Free

Please bring your ticket to smooth check-in. On the afternoon of the event our on-venue are closed. You can still check-in our reception site.

Upcoming events

Events on March 13, 2012

Technical Meeting: Creating System-On-Chips: Mixing HW & SW Successfully

Starts: 6:30 PM
Ends: March 13, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA
Description: Sign-up at <http://bit.ly/14t8w>

Events on April 11, 2012

Technical Meeting

Starts: 6:30 PM
Ends: April 11, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Events on May 7, 2012

Technical Meeting

Starts: 6:30 PM
Ends: May 7, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Events on June 11, 2012

Technical Meeting

Starts: 6:30 PM
Ends: June 11, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Events on July 10, 2012

Technical Meeting

Starts: 6:30 PM
Ends: July 10, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Events on August 13, 2012

Technical Meeting

Starts: 6:30 PM
Ends: August 13, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Events on September 10, 2012

Technical Meeting

Starts: 6:30 PM
Ends: September 10, 2012 - 8:30 PM
Location: Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Events on October 9, 2012

Facebook, Twitter, LinkedIn groups

Google event calendar

Sponsor ship information

Integrated Eventbrite ticket processing

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Santa Clara Valley Section



CS Chapter Report 2012

•Financial Status per 1/25/12 total: \$39,901.25

	CB	Inr	WF-Check	WF-Sav
Jan 23	\$3917.65	\$2838.03	\$1353.63	\$31791.94

•Current Chapter Membership (SAMIEEE data)

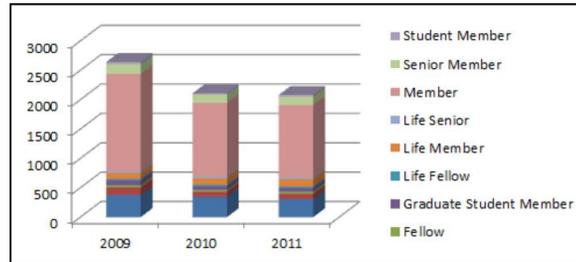
Number of Active Chapter Members

IEEE Current Grade Description	Count of Members
Affiliate	310
Associate Member	87
Fellow	37
Graduate Student Member	65
Life Fellow	24
Life Member	128
Life Senior	29
Member	1230
Senior Member	142
Student Member	29
Total	2081

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CS Chapter Report 2012

Membership data



Grade	2009	2010	2011	2012 sub totals
Affiliate	377	348	310	
Associate Member	129	86	87	
Fellow	33	28	37	
Graduate Student Member	86	67	65	1910
Life Fellow	24	24	24	
Life Member	107	114	128	
Life Senior	28	26	29	
Member	1655	1253	1230	
Senior Member	170	143	142	171
Student Member	33	19	29	
Total	2642	2108	2081	2081

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CS Chapter Report 2011

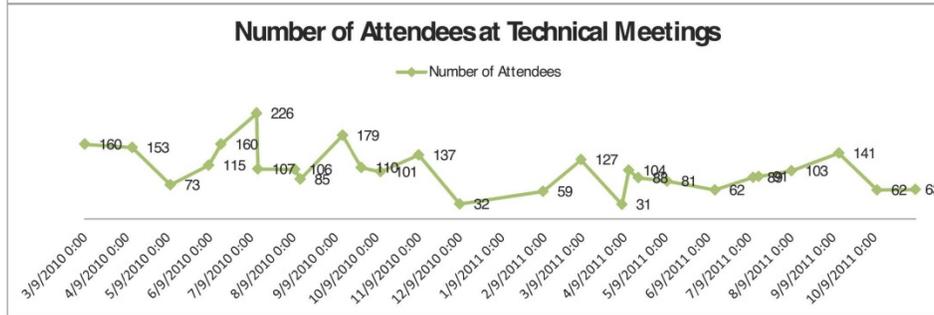
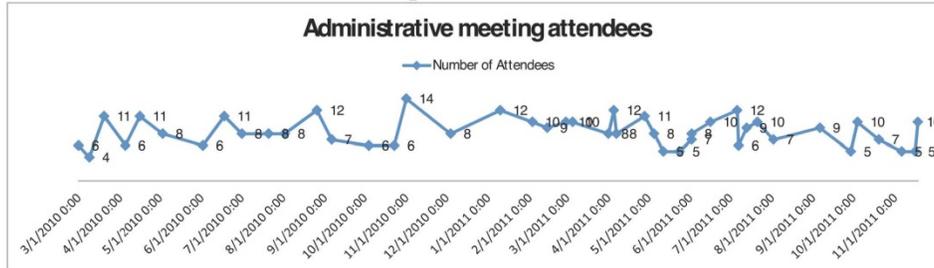
•Activity location

•Cadence / Bldg 10, 2655 Seely Ave, San Jose, CA

Participatory Urbanism: Smart Computing or Big Brother is Watching?	8-Feb Keshava Rangarajan, Applications Architect	Oracle
Stereoscopic-3D: looking at the next decade	8-Mar Sunil Jain, MSEE Lead Architect and Strategy Planner	Intel Corporation
Cloud Computing: Compelling Architectural Considerations	12-Apr Alan Hakimi, Senior Enterprise Architect	Microsoft
small processors solve BIG PROBLEMS	10-May Dr. Chris Rowen, Founder and CTO	Tensilica, Inc.
Smart Meter Analytics: What can we learn from the data?	14-Jun Harald Weppner, Fellow – Corporate Strategy Group	SAP Labs
Future Vehicle Computer System in a Five Screen World	12-Jul Roger D. Meien, Senior Advisor Byron Shaw, PhD, Managing Director	Toyota InfoTechnology Center U.S.A., Inc. GM's Advanced Technology Office Silicon Valley
Memfistors in Computing: Promises and Challenges	9-Aug Jianhua (Joshua) Yang, PhD	HP Labs
GPU Computing: Taming a 23,000 Thread Beast!	13-Sep Michael Shebanow, Ph. D., Principal Research Scientist	NVIDIA
AI Techniques and Applications: Surprising Solutions That Really Work	11-Oct Jason Lohn, Associate Research Professor, ECE Dept.	Carnegie Mellon University, Silicon Valley Campus
On-Chip Interconnect: Demanding Challenges for Complex SoCs	8-Nov Drew Wingard, Chief Technical Officer	Sonics, Inc.
Event available via real-time broadcast and on-demand web cast		

Filename: SCV-CS-AnnChapReport-2012-02R0

Meeting attendance



Filename: SCV-CS-AnnChapReport-2012-02R0

CS Chapter Report 2011

- Event calendar
 - 6:30 PM (PT) Networking/Refreshments
 - 7:00 PM Presentation
 - 8:10 PM Q&A
 - 8:20 PM Thank you to speaker
 - 8:30 PM Closure
- Upcoming events
 - Feb: "From Love to Trust: the Cloud Security Firewall", Symantec
 - Mar: "Creating System-On-Chips: Mixing HW & SW Successfully", Cadence
 - Apr: "Multicore, the Memory Wall, and Numerical Compression", Simplify Systems
 - Every month until and including November

**Filename: SCV-CS-
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CS Chapter Report 2012

•Miscellaneous

- Calls to action
 - What do we offer to IEEE members specifically? Should we have motivators to become IEEE member?
 - Wordpress based, IEEE hosted: too many limitation
 - It is too cumbersome, and often impossible (not allowed) to add Wordpress plug-ins to accommodate an easier and better web site experience. IEEE CS SCV will investigate having their own WP web site hosting.
- Member of SVEC
 - IEEE CS SCV table, \$500 student sponsorship
- Sponsoring SJSU 'Spherical Driver System' project (2012)
 - \$1500 sponsorship level
- Co-sponsored events
 - NFIC: <http://www.nfic-us.org/>
 - EDPS: <http://www.eda.org/edps/>
 - Will IEEE cover liability insurance for sponsored events?



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THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
Santa Clara Valley Section

Examples of Prior Winners

2013 Outstanding Chapter: Communications society (ComSoc)

Supporting information:

Despite the global telecom industry continuing to contract economically, IEEE ComSoc SCV chapter has made (and continues to make) notable accomplishments in fostering enthusiasm for the field among both the telecom professionals and telecommunication companies in Silicon Valley.

- Average attendance at monthly chapter meetings has increased nearly ten-fold over the last 6 years.
- Several successful industry field trips were organized.
- Several highly successful workshops were conducted which attracted on average of over 110 attendees.
- Significant corporate sponsorship has been procured to further strengthen the chapter's (already solid) financial health.



Additionally, IEEE ComSoc SCV has served the engineering community in a multitude of ways – fostering synergy with other IEEE SCV chapters by means of conducting numerous joint events, collaboration with other (non-IEEE) non-profit professional and engineering organizations, organizing socials for professional networking, running an email-based discussion group to serve the engineering community and annual recruitment of new chapter volunteers and chapter officers.

- Increased ComSoc membership within SCV from 900 in 2006 to 1200 in 2011. It's now ~1080 as of Jan 2013, even as telecom industry continues to contract.
 - Increased attendance at monthly technical meetings from 8 to 12 in 2006 to avg. of 85 in 2011
 - Average attendance at each 1/2 day joint workshop from 2009 was over 110 (e.g. Workshops with TiE, SVC Wireless, NATEA, and IEEE CAS).
 - Got corporate sponsors to pay for refreshments and have a table to discuss their products/services during networking hour that precedes technical meetings/workshops
 - Initiated "field trips" to telecom network operators- AT&T, Sprint (2), and DT
 1. July 2010 AT&T U-Verse Lab -San Ramon, CA
 2. Mar 2011 Sprint M2M Innovation Center, Burlingame, CA
 3. Jan 2012 Briefing at Deutsche Telekom/T-Labs, Palo Alto, CA
 4. March 2013, Sprint Network Vision Seminar & Tour, Burlingame, CA
 - Joint technical meetings and workshops with other IEEE SCV Societies, e.g. IEEE Computer, IEEE CAS, IEEE CES.
 - Joint technical meetings & workshops with other non profits, e.g. TiE, SVC Wireless, NATEA, Silicon Valley Indian Professionals Association (SIPA).
 - Networking socials with themed discussions- ComSoc SCV paid for drinks & appetizers followed by no host dinners.
 - We also held a joint social in 2010 with IEEE Computer Society. It was very well received.
 - IEEE member discussion group (since Jan 2006)-usually 5 to 10 posts per week
 - Extensive use of Linked In group and Facebook page; Twitter to a lesser extent.
 - Recruitment & training of new officers EACH year
 - Participation in IEEE SCV ExCom activities where we discuss volunteer opportunities with other chapters, e.g. joint booth duty at Ethernet Summit with IEEE CNSV (Consultants group)
 - Hosted booth for all CA ComSoc chapters at IEEE/Computer History Museum event in 2011.
-



Examples of Prior Winners

2014 Outstanding Chapter: Nanotechnology Council

Supporting information:

IEEE SFBA Nanotechnology deserves the Outstanding Chapter Award because, it has, for the last 9 years accomplished more than the main objective of IEEE chapters, providing outstanding events that educate the engineering community at large and creating a forum for academics and entrepreneurs to join with engineers to create new opportunities for society. Being a highly interdisciplinary field, its symposia and seminars have had an impact on a wide range of traditional IEEE disciplines. It has also created a forum for highlighting cutting edge and emerging IEEE disciplines. It has overwhelmingly supported student activities and collaboration with other professional societies. Here are the key achievements:

1. Technical Events:

- Each year, since 2004, we hold ten monthly seminars.
- Each year, since 2004, we offer a full day symposium in spring and a half day symposium in fall.
- In 2013, we organized 10 monthly seminars and in addition, two full day symposia and one half day student symposia.
- All events include food\refreshments. In the past two years, 3-4 events per year are free to all attendees.
- Student symposia are free for attending students.
- Co-host at least 2 events an year with other chapters or technical organizations.
- The technical content of the monthly seminars highlight the application of nanotechnology in cutting edge products and also focuses on basic research.
- The technical theme of the symposia is varied each year. It highlights the application of nanotechnology in areas such as Green Energy (solar, batteries), Flexible Electronics (OLEDs, Displays), Computing and Memory, Nanoelectronics, Biomedical devices. The varied range of events covered is of interest to a very wide number of IEEE fields.
- Many symposia feature panel discussions, where emerging technologies are analyzed for their growth potential and also highlight lessons learned.

2. Attendance and Membership:

- On average we have 50+ attendees for the seminars and 75+ for the symposia.
- Most successful symposia have had over 175 attendees.
- Maintain an active Listserv distribution of over 1000 email addresses.
- A dozen chapters support our council.
- Meeting attendance is typically two third IEEE Members (affiliated to any chapter) and one third non-IEEE Members.

3. Financial Health and Sponsorship:

- Texas Instruments, HP, Applied Materials, IBM, Svaya (in the last two years) and Nanostellar, Nanogram, Adesto, TSMC (in the past).



- Sponsorship from university (Berkeley, Stanford) affiliates for the student symposia.

4. Student Activities:

- Serve as a mentoring ground for students (prospective future IEEE members).
- A dedicated student representative in the Excom since 2012.
- Organizing fall half day student symposia. Berkeley (2012), Stanford (2013).
- Poster presentations by student participants from UC Berkeley, Stanford, SJSU, SCU, UC Merced, UC Santa Cruz. Gift cards for students presenting.
- Financially supporting student awards through SVEC.
- Our student events are free for the students and include food and refreshments.

5. Interaction with other IEEE chapters, universities, professional organizations and federal grant agencies:

- Co-hosting seminars with other IEEE chapters (EDS, Photonics, CPMT, and Magnetics).
- Co-hosting student symposia with university entities such as Berkeley Nano Club (BNC), Center for Energy Efficient Electronics Science (E3S), Stanford Materials Research Society (MRS), Stanford Energy Club and grant agencies such as National Science Foundation (NSF).
- Supported Silicon Valley Engineering Council (SVEC) educational awards.

6. Active Excom:

- Each year Excom members number 12-14.
- Each year officers elected include Chair, Vice-Chair, Treasurer and Secretary, each with allotted roles.
- Administrative meetings are held on the first Tuesday of each month at El Torrito, typically with 90% attendance.
- All Excom members participate in bringing in monthly speakers and organizing symposia.
- Recruit new members each year whose technical expertise broadens the core technical capability of the Excom to new areas. In 2013 we inducted two new members with skills in nano-bio-sensors and semiconductor processing.

7. Active Online Presence:

- Members can pre-register through 123 signup and are informed the week prior to the event through a listserv mailing, in addition to the monthly E-GRID announcement.
- Maintain an active webpage, updated each month (sometimes twice a month if there are more events in a month).
- The webpage also maintains an archival list of previous events, including talk slides in pdf format.



- Pioneered a new technology, PayPal Triangle, in 2013 Spring conference. The first chapter or council in the entire IEEE to do so. Adopting this technology enables attendees to pay on site using their credit card, which is directly linked to IEEE's concentration banking.

8. Networking Opportunities:

- Monthly seminars and symposia have provided a meeting ground for networking.
- Provide a platform at the end of the meetings for job seekers (and recruiters) to give an elevator pitch, thus providing the engineering community with an opportunity to connect during these recession years.

More than any other chapter, the IEEE SFBA Nanotechnology Council, due to its diverse technical reach, involving nanotechnology and nanoscience applications, has exposed the engineering community to the educational and professional opportunities of membership in this IEEE Society.

What specific significant or distinguished contributions or achievements made you decide to submit this nomination?

1. A successful forum connecting IEEE members, students and entrepreneurs through monthly seminars and conferences relevant to the current needs of the industry.
2. 10 monthly seminars, a full day spring conference and a half day fall conference held every year since the chapter's inception nine years ago. For a full list of talks and conference themes, please see the attached Supporting Document 2.
3. Dedicated student symposia each year, organized by a student rep in the Excom.
4. Integrated student activities and provided support for student scholarships.
5. A website that is updated every month with the name, speaker bio and talk abstract of the upcoming seminar or conference.
6. Maintaining a high level of fiscal responsibility and self-sufficiency. We have a healthy bank balance of about \$18,000. It is to be noted that we started with just a \$500 grant from the section in 2004.
7. Every year we have updated the section, giving a complete accounting of our finances and professional activities, in the annual report presentation.
8. Members served include those with a diverse background in science and engineering, due to the highly interdisciplinary nature of nanotechnology.
9. Co-sponsoring events with other IEEE societies\chapters (EDS, Photonics, CPMT, Magnetics), thus maintaining an active collaborative atmosphere for engineering research. Also collaborate with academic entities.
10. Conferences themes have included cutting edge areas of current and future relevance such as "Nanotechnology-Consumer Applications" (May 2011), "Emerging Non-volatile Memory Technologies" (April 2012), "Nanovation: From Science to Startups" (Oct 2012), Nanoengineered Biomedical Devices (Nov 2013), Energy Generation and Storage (Nov 2013).



11. Symposia have served to educate our members on high growth potential technologies.
12. The conferences have also provided a platform for job seekers.
13. Has a list of more than 1000 members in the regular listserv.
14. The meetings serve as a platform for new members to join and volunteer in the executive committee. 12-14 strong Excom attend administrative meetings every month.
15. High quality annual report to the section each year. Awarded the SVC Chapter Exceptional Achievement Award some years ago.

1. Technical Events:

In 2004 the field of nanotechnology was finally beginning to emerge from being an academic discipline to engineering applications and products. The founders of what would become the IEEE SFBA Nanotechnology Council Chapter initiated the effort to provide a stable forum for the exchange of information about this nascent field and make opportunities for networking available. Since that humble beginning, SFBA Nanotechnology chapter has held over 90 noon time seminars, covering all aspects of nanotechnology and its applications in engineering and science. In addition IEEE SFBA Nanotechnology chapter has held 9 full day symposia and 9 half day symposia that have attracted up to as many as 175 attendees per event. It maintains a dedicated website www.ieee.org/nano, with a record of the past events. These seminars have featured a Nobel prize winner (Dr. Arno Penzias), IEEE Distinguished speakers and a US Congressman (Mike Honda). The complete list is topics from 2004-2013 is given in the Supporting Document 2, at the end.

Each year we hold 10 monthly seminars and two conferences - a full day symposium in spring and a half day symposium in fall. In 2013 we decided to hold two full day symposia in May and November. In addition, a half day student symposium in November was held in collaboration with Stanford University. We co-host many events with other IEEE chapters and professional societies. All our symposia include food and refreshments. Further, since 2012 we have begun to offer at least 3-4 free noontime seminars as a gesture of appreciation for our members. Our student symposia are always free to all students.

In the nine years since its founding, we have remained committed to expounding the advance of nanotechnology, as it moves from academic labs to the mainstream and to areas of future relevance. The symposia have highlighted the application of nanotechnology in various emerging fields such as Green Energy (solar-May 2010, energy storage-May 2011,Nov 2013), Flexible Plastic Technologies (displays & OLEDs-May2011), Computing (non-volatile memories-April 2012, May 2013, nanoelectronics-May,Nov 2010), Biology and Medicine (biomedical devices-May 2010, May\Nov 2013) etc. Speakers work at the very cutting edge of these technologies, both in academia and industry. Many of our symposia feature panel discussions, where the technology is analyzed for its growth potential and lessons learned. Inputs are gained into how the entrepreneur came up with the idea. All of this makes our symposia a wholesome experience for the attendees.

In 2006 we applied to become the first Chapter of an IEEE Council and were granted chapter status under the IEEE Nanotechnology Council. Since then more chapters have been founded

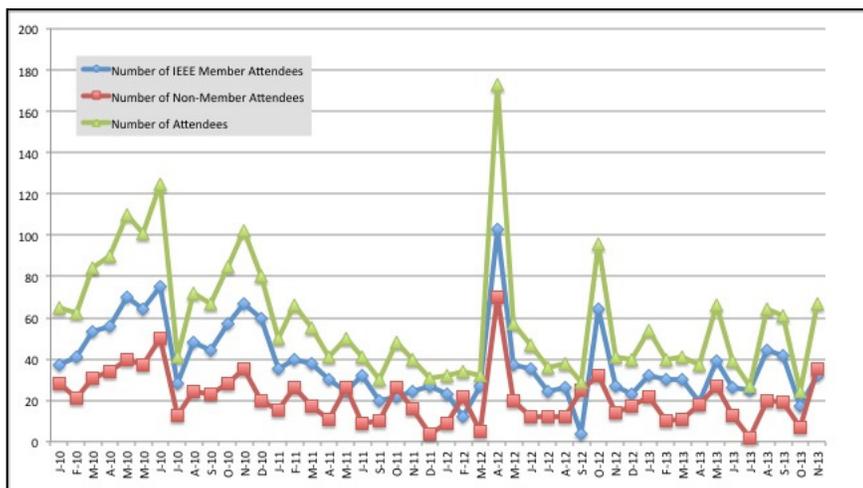
worldwide, but the SFBA Chapter was the first and it provided the Santa Clara Valley Section with another distinction of being the first among all Sections to embrace this new technology. It will be clear from a reading of topic 7 that this year we were also the first in the history of IEEE to adopt another new technology- PayPal Triangle and link it to IEEE concentration banking. This enables attendees to pay at site using a credit card.

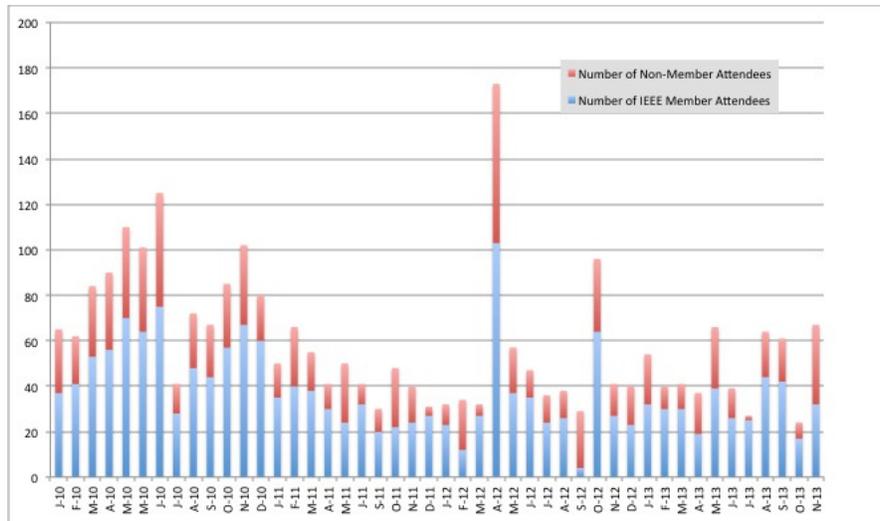
Thus the Chapter provides a forum where students and members of the engineering community exchange information, become educated and network with likeminded persons.

2. Attendance and Membership:

The SFBA Nanotechnology Chapter’s noontime seminars at Texas Instruments typically attract upwards of 50 attendees, with one third of the attendees being non IEEE members. Each symposium attracts over 75 attendees, and we have had over 175 for the most successful event. All these events help advance IEEE membership. In the past few years we have had many new members join and actively serve on the Excom and take up IEEE membership. We maintain a Listserv distribution of over 1000 email addresses, many of whom are not IEEE members but are potential member candidates.

The graphs below displays vTools attendance statistics since 2010, showing a growing membership since the recession dip of 2011. The peaks are symposium attendances. The chapter reports all its technical and administrative meetings by L31 reports.





IEEE SFBA Nano council is a SCVXCOM council and is a chapter of the IEEE Nanotechnology council. It was the first council to have a chapter status after IEEE allowed councils to have chapters. There are 29 chapters and 2 councils under IEEE SCVXOM (one of which is Nano and the other TMC). Since it is not a society, it does not have exclusive membership and is also not on the SAMIEEE list. More than a dozen chapters support our council. Our meetings are typically two third IEEE Members (affiliated to any chapter) and one third non-IEEE Members. There is no way to determine the membership of a council other than to add up all the members of the societies that constitute it. Also, there is no way to measure the membership of a Council Chapter. One way to measure a membership is to count the number of people who have asked that their name be put on our mailing list and have allowed it to remain there over time. That would be our list serve list of 1000 members.

3. Financial Health and Sponsorship:

The SFBA Nanotechnology Chapter has remained fiscally sound during its entire history and maintains an appreciable bank balance. It is to be noted that the Chapter was started in 2004 with just a \$500 grant from the section. From its humble beginnings it has grown considerably and is totally financially independent. As of November 2013, the account balance is close to \$18,000. Every year we have updated the section, giving a complete accounting of our finances and professional activities in our annual report.

Many companies involved in nanotechnology research have supported us with sponsorship. These include Texas Instruments, HP, Applied Materials, IBM, Svaya in the last two years and Nanostellar, Nanogram, Adesto, TSMC in the past. Sponsorship from universities affiliates for on location Berkeley, Stanford student symposia have been helpful.



Treasury Report 2009-2013

4. Student Activities:

The SFBA Nanotechnology Chapter has remained engaged with student activities in a number of ways. It has sponsored annual college scholarships through the Silicon Valley Engineering Council for high school students and has active programs at Stanford & UC Berkeley to facilitate student interest in nanotechnology and serve as a platform where they can exchange ideas and have exposure. Since 2012, we have held two dedicated student conferences in collaboration with universities. These student symposia organized by the Chapter have been an innovative experiment that has brought university graduate students together to not only present their research to the engineering community but also for the engineering attendees to provide real world feedback to the presenting students. Student symposia have also featured poster presentations from UC Berkeley, Stanford, SJSU, SCU, UC Merced, UC Santa Cruz students. We have awarded gift card for students presenting and the students attend for free. All these efforts serve as a mentoring ground for students (prospective future IEEE members).

The 2012 student symposium in UC Berkeley was titled “Nanovation: From Science to Startups.” Recent graduates, who had started their own companies, presented to current students on their entrepreneurial experiences beyond academia. The 9 Nov 2013 student symposium in Stanford, "Energy Generation & Storage: Possibilities and Realities", featured presentations from both academia and startups. Panel discussions helped students learn the about patent issues, raising funds to sustain a startup, marketing strategies and developing off grid energy technology to benefit the developing world.

5. Interaction with other IEEE chapters, universities, professional organizations:

The Chapter has co-sponsored many events on overlapping topics with the EDS Chapter, the CPMT Chapter, the Magnetics Society Chapter and the Photonics Society Chapter. It routinely promotes courses in nanotechnology at local community colleges as well as a nanotech tools training course at UC Santa Cruz Extension. Berkeley Nano Club (BNC), Center for Energy Efficient Electronics Science (E3S), National Science Foundation (NSF), Stanford Materials Research Society (SMRS), Stanford Energy Club have sponsored student symposia. The chapter has in the past supported Silicon Valley Engineering Council (SVEC) educational awards.



6. Active Excom:

Our executive committee is currently thirteen members strong and despite being totally volunteer run, is vibrant and committed to our goal. Our Excom members' technical expertise covers a gamut of fields, including engineering, physics, chemistry and bio-nano. This enables us to enlist the very best speakers in all of these areas where nanotechnology is of relevance.

Each year officers elected include the full deck of Chair, Vice-Chair, Treasurer and Secretary, each with allotted roles. All Excom members participate in bringing in monthly speakers and organizing symposia. We have student representation in the committee. Excom administrative meetings are held on the first Tuesday of each month and is attended by 90% of the Excom members. We actively recruit new Excom members each year whose technical expertise broadens the core technical capability to new areas. In 2013 we inducted two new members with expertise in nano-bio-sensors and semiconductor processing. Excom members have actively participated in promoting IEEE and chapter activities at various events, such as manning the display at the "Nano booth" in the Computer History Museum, during the 2011 IEEE Congress event. This was rated as one of the top booths by the attendees.

7. Active Online Presence:

The Chapter maintains a modern and up to date WordPress based website, maintained by a current Excom member. It can be seen at <http://sites.ieee.org/sfbanano/>. Every month, the website is updated with the upcoming talk title, bio and photo of the speaker and the talk abstract. The webpage also maintains an archival list of previous events, including talk slides in pdf format. The image in "Supporting Document 1" shows the webpage as a screenshot. The older IEEE hosted website at http://ewh.ieee.org/r6/san_francisco/nntc/index.php?mode=index2 lists the activities till 2012.

The 1000 member strong listserv has email blasts the week of the event, in addition to the monthly EGRID announcement. Members can pre register through 123 signup, an online event registration service. In 2013 we pioneered a new technology, PayPal Triangle. Adopting this technology enables attendees to pay using their credit card, which is directly linked to IEEE's concentration banking. Many hours were spent back and forth by the chapter treasurer with the New Jersey headquarters folks to make this happen. We have been informed by the HQ that we are the chapter\council in the entire IEEE to do so.

8. Networking Opportunities:

The symposia and monthly meetings of this chapter have served as a venue not just to share knowledge and information about nanotechnology and its applications, but also as a forum where engineers can connect for job opportunities. This has been very important during the recession's years. The seminars have served to educate our members about new emerging technologies having a high growth potential. The conferences have also provided a platform for job seekers (and recruiters) to give an elevator pitch and be heard, thus hopefully connecting them to the right opportunity.



In Conclusion:

This chapter deserves the Outstanding Chapter Award because it has for the last 9 years met, in an overwhelming fashion, the main objective of IEEE chapters, *i.e.* providing outstanding events that educate the engineering community at large about nanotechnology, providing forum for academics and entrepreneurs to join with engineers to create new opportunities for society. Perhaps more than any other chapter, the IEEE SFBA Nanotechnology Council, due to its diverse technical reach, has exposed the students and engineers to the educational and professional opportunities of membership in the Society. Further, since nanotechnology is an emerging interdisciplinary technology and not a traditional engineering field, the effort by the Excom to increase awareness and be successful at that is commendable.

It is also to be noted that while some south bay chapters have done a good job in the last few years, IEEE SFBA Nanotechnology council chapter has consistently done well in all nine years since its inception, in terms of the quality and number of talks, diverse fields it has covered and attendance to those talks. To give an analogy from astronomy, we have not been a short duration supernova, but a very high luminosity stable main sequence star.



Outstanding Small Student Branch

(<26 active members as of April 30, 2016)

Outstanding Large Student Branch

(26 or more active members as of April 30, 2016)

There are two different Student Branch awards because a small school cannot compete with the number of activities of a large school. The officers are usually chosen in early September when classes begin. Many officers leave the following June when they graduate. Therefore the activity period upon which they will be primarily judged is their school year from Sept. 2015 up to the nomination submission due date which is May 13, 2016. If there are continuing projects from the previous Spring, the nomination form may include those projects.

These two awards recognize Student Branches which represent the IEEE and encourage participation in extracurricular activities that further the development of the students as future engineers. Some of these activities are meetings in which faculty or outside lecturers are secured to share knowledge and experience about preparing for jobs after graduation. Other lectures might be on topics that are highly interesting to students such as electric vehicles, worldwide communications for internet, sensor technology, or biomedical applications. Occasional fun parties such as pizza, bowling, and hiking can help students bond with each other and relax from the pressure of their studies. Some Student Branches have dedicated rooms for their activities and they may stock food or beverages for their members. The outstanding Student Branches take on research or development projects as a group. Often the Student Branch is the only means for engineering students to learn how to actually solder and construct working circuits. For example, some projects might be related to microprocessors and some might be radio.

The nominations from the Student Branches are judged by

- the number of meetings and activities
- the number of students actively participating
- the success in carrying out the objectives of the IEEE
- innovations and creativity of their projects

Examples of Prior Winners

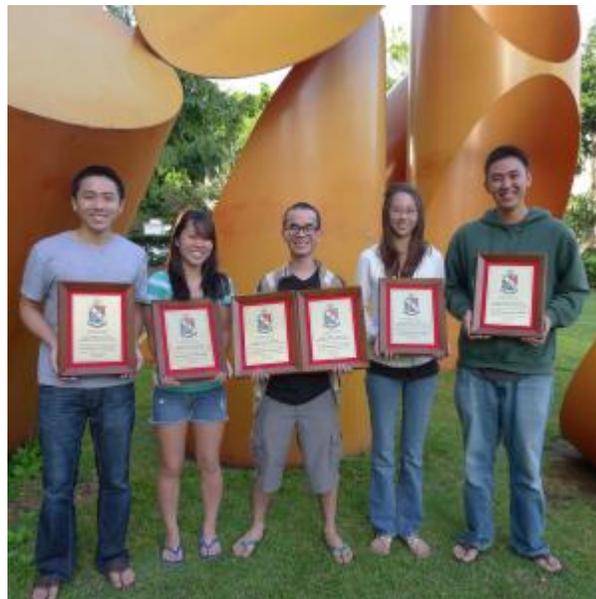
2013 Small Student Branch: Univ of Hawaii - Manoa

Supporting information:

The Student Branch should be commended for its initiatives in a multitude of areas. The student branch made a bid to host the spring micro-mouse, student paper and project design competition for the Central Area this year. The student branch had two members, Joshua Rivera and Matthew Inouye, appointed as student representatives for the Hawaii Section. Other branches may have one student representative, but they have two. Other student branches may have innovative positions, but how many have senators, historians, etc. They formed a new chapter this year. The IEEE Microwave Theory and Techniques Society student chapter was formed on September, 7, 2012 by the IEEE Student branch of the University of Hawaii-Manoa.

MTT-S Chapter Officers

Chair: Andy Morishita, Vice-Chair: Kelson Lau, Secretary:Carolynn Kitamura, Treasurer: Nicholas Fisher, Historian: Chester Ramos, and Activities Director: Kainalu Matthews.



Chapter members are interviewed by local TV channels about a NASA grant. Here is a link: <http://www.kitv.com/UH-engineering-team-creates-small-satellite-earns-NASA-grant/-/8906042/10343386/-/mht1c1/-/index.html>. They have interesting projects, such as, “Microthruster Design and Development for Next-Generation Nanosatellites”, etc.

The branch created an entirely new Facebook page, <http://www.facebook.com/pages/IEEE-Student-Branch-UH-Manoa/253524998100499>, which conveys a most favorable impression of the IEEE. There you learn about everything from their new tee shirt design to how they won the inter-engineering penny wars.



The branch has a website, <http://www4.eng.hawaii.edu/~ieeee/join.html>, which exemplifies how membership in the IEEE should be promoted while showcasing their officers and activities in a most effective way. It even has links to a new micromouse tutorial, the Hawaii Section website, and STEM resources. I placed an example from their website at the end of this write-up.

Last year the Student Branch took 1st place in the Region 6 Micromouse Competition. This year, they have awesome set of 20 micromouse teams working on mice this semester, 8 of them with at least one returning member, some for their 4th year. They even experiment with new technology such as DC motors. They are trying to arrange an interisland competition with the new student branch on Maui.

They planned a fantastic set of activities for the year. These include the First General Meeting, Summer Internships and Coops Seminar, Resume Writing Workshop, and Bytemarks Talk with Burt Lum, AutoCAD Workshop, Matlab Workshop, Soldering Workshop, Technical Resume Writing Workshop, Interview Workshop, Eagle and/or PCB Design Workshop, H-Power Tour, Referentia Tour, Solar Farm Tour, Krispy Kreme Fundraiser, T-shirt Fundraiser, Game Tournament Fundraiser, Weekly Sports Day Social Event, BBQ Social Event, Movie Night Social Event and an S-PAC.

The Hawaii Section and UH-Manoa Student Branch also have joint meetings, such as, a Branch Business Card Exchange meeting in April and the Engineering Week Awards Banquet in February where an IEEE Student Branch member, Jonathan Dang, received the 2013 Outstanding Student Engineer of the year. Many student branches take part in Engineer's Week in February of each year. But, UH-Manoa is the only school I know of has followed it up with an Engineer's Week in March specifically geared to students.

Events:

Resume & Summer Internship Workshops

Throughout Fall 2012, Marine Science Building 110

Description: Professor Galen Sasaki conducted workshops with the help of IEEE where companies on the island (Spirent, Referentia, Swinerton Builders, Pearl Harbor Naval Shipyard, etc.) Spoke to interested students about the ToDo's for impressing a company.

IEEE Xtreme Programming Competition 6.0

October 20th, 2012, Holmes Hall 411 (IEEE Clubroom)

Description: 13 teams of 23

Students competed in the annual programming challenge. The best team from the University of Hawaii ('NoGeopro') placed 5th in Region 6, 93rd in the world. Majority of all the teams placed in the top third of the world. Professors Tep Dobry and Ying Fei Dong proctored all the teams.



IEEE Competition

March 8th 9th,

2013, Holmes Hall 411 (IEEE Clubroom)

Description: Teams of 23

members assembled circuit components and programmed PIC

Microcontrollers to showcase skills they learned in their class. Winning team awarded Arduino Uno.

IEEE Tech Talks

April 5th, 2013, Holmes 389

Description: Tony Giandomenico, Director of Solutions Marketing, spoke to interested guests about the Cyber Security Business.

Weekly Events:

EagleCAD Workshop

Mondays, IEEE Club Room

Description: Members are welcomed to participate in a 7week

intro series to pcb design with

EagleCAD. Workshop is led by graduate student Andy Morishita.

Python Night

Fridays, IEEE Club Room

Description: Members of all skill levels gather to teach other Python and impressive projects.

Workshop is led by undergraduate Adam Oberbeck.

One programming team from the student branch placed 132nd out of the 1941 teams worldwide in the [IEEEXtreme 24-Hour Programming Competition](#).

Members of the student branch are also instrumental in planning the 50th anniversary of the UH Chapter of Eta Kappa Nu. Members also take part in Stem activities such as tutoring in mathematics. The members are well rounded individuals who take part in a wide variety of activities. They are so modest I had to dig up all this information on my own. But, with today's internet it is easy to do. Their outstanding presence on the media is a great asset to the IEEE and another reason they should be commended. I trust I have uncovered enough of their accomplishments to show how much they deserve this award.

In summary, they have outstanding officers who are true leaders and fantastic teams in many categories who deserve to be recognized as the great group of students and well-rounded individuals they are.



Examples of Prior Winners

2015 Large Student Branch: Univ. of Calif, Los Angeles (UCLA)

Supporting information:

The UCLA IEEE Student Branch deserves recognition from Region 6 because of our outstanding achievements this past year with our projects and professionalism events. In this past year alone, UCLA IEEE has nearly doubled the size of many of its projects (namely NATCAR and Micromouse, with OPS seeing a doubling in applicant pool) and significantly expanded the availability, effectiveness, and success of its members.

Within NATCAR itself, the project has almost more than doubled in size compared to previous years and is seeing completion rates of over 70%, which is unprecedented given how previous years performed. Micromouse, the project that aims to create a maze-solving robot, has seen a huge rise in completion rates as well and a surge in interest in the past year. Lastly, OPS, our introductory program that teaches incoming freshmen and sophomores basic electronics skills, saw a doubling in applicant pool from 100 to 200. Over 100 were accepted into the program and are seeing significant completion rates nearing or exceeding 50%, which is very high compared to past years. OPS has done an amazing job at educating newcomers and providing them with a foundation to base more advanced projects off of.

For events, UCLA IEEE has had an incredible year as well. Our annual S-PAVe was significantly changed from previous years, and we brought in alumni speakers who gave valuable advice for students no matter what paths they were taking with their professional career. Our Entrepreneurship Expo, cohosted with multiple other engineering organizations on campus, provided attendees with valuable insights into starting a startup company and the challenges associated with them. Lastly, one of our biggest events in this past year was (IDE)A Hacks, the first hardware hackathon in the West Coast of the US. Co-hosted with Theta Tau, the professional co-ed engineering fraternity, UCLA IEEE successfully planned and executed a hardware-themed hackathon with a focus on wearable tech, seeing over 140 attendees. We received very good feedback from all events and expect them to get better in the coming years. Along with our big events, however, we constantly host Infosessions with both high-profile and smaller companies looking to hire engineers. Companies that we host are focused in the tech field, and examples of companies we hosted this past year were Boeing, Dolby, SanDisk, and Texas Instruments. These Infosessions provide valuable opportunities for students to connect with industry professionals, and have in many occasions helped people land an internship or full-time job. Without a doubt, UCLA IEEE's events provide important professional development for our members, and have been a core focus of our organization.

What specific significant or distinguished contributions or achievements made you decide to submit this nomination? (attachments if needed)**

Every year, UCLA IEEE allows new and old participants alike a place to learn and grow in academic, professional, and social ways. Our student branch manages a large lab space on campus that fosters a community feel to it while providing all the resources anybody might need to complete a project, so that nobody feels left out. We regularly encourage people from any major and any department to utilize our resources and readily provide help when it is needed or asked for. These facets of our organization make it truly one of a kind, where any student is welcomed in with open arms and is allowed and encouraged to grow by utilizing their



surroundings. There are few, if any other organizations that serve the purpose UCLA IEEE does: we allow students to join no matter who they are, and ensure that anybody who is interested in joining benefits from all of our shared experiences and knowledge. One example that stands out was something that happened in 2014. A student who was an Art major was going to a concert of one of her favorite Chinese artists, and wanted to make an LED sign of his name to bring to the event. Without hesitation, our members taught her how to solder together LEDs together in parallel and guided her on placing them on a foam board that she could bring. Within 6 hours, she had a completed product to bring to the concert that was fully functioning. Our organization provided her with all the tools she needed despite the fact that she had no knowledge or relevance to EE, nevertheless, we brought out over 100 LEDs, a soldering iron, and all the solder she needed to accomplish her task. This is what UCLA IEEE is all about: our organization truly provides people with what they need to do what they want, whether or not it is to find a job, gain useful skills, learn professional skills, or work on fun projects.

Outstanding Small Section

(<501 active members as of April 30, 2016)

Outstanding Large Section

(501 or more active members as of April 30, 2016)

There are two different Section awards because a small Section has fewer volunteers and cannot compete with the number of activities of a large Section.

To recognize the outstanding work of an IEEE Section based on its success in carrying out the objectives of the IEEE through the implementation of the Section's programs. In this evaluation, recognition will be given to the successful maintenance of ongoing efforts designed to sustain the basic core activity of the Section and its components as well as recognizing innovative and creative efforts to develop and implement new programs or new entities such as Chapters, Councils, and Affinity Groups.

The IEEE MGA specified criteria are:

for their successful efforts in fulfilling the educational and scientific goals of IEEE for the benefit of the public by maintaining, enhancing, and supporting the Student Branches, Technical Chapters, and Affinity Groups within their geographic boundaries.



Examples of Prior Winners
2015 Outstanding Small Section:
Los Alamos, Northern New Mexico Section

Supporting information:

Section satisfies members' needs, proved by very low drop numbers. It organizes many technical meetings, e.g. 8 in 2014 (as for a small section); recently started a new chapter (signal processing...); strongly supports women in engineering activities; one of the members serves as vice director of IEEE USA Board.

What specific significant or distinguished contributions or achievements made you decide to submit this nomination?

Very high percentage of satisfied members who renew membership yearly



Examples of Prior Winners

2015 Outstanding Large Section: Santa Clara Valley (SCV)

Supporting information:

Summary:

According to IEEE Member Development, the Santa Clara Valley Section R60369-(SCV) is the largest Section in the IEEE globally with 12,269 members reported by MGA for Year-End 2014. The Santa Clara Valley Section faces significant challenges managing 35 organizational units, 4 Section committees (with 160+ ExCom members in vTools), 5 student branches and 4 student branch chapters, with 15+ Counselors/Advisors and Student Officers in vTools and with 54 bank accounts total. The SCV Section OU's have hosted or co-sponsored 214 technical meetings plus 21 Professional Development meetings in 2014. Managing this level of activity has required monthly Section Excom meetings, each running approximately 2 hours in 2015.

These 2014-2013 SCV-Section membership statistics from: <http://www.ieee.org/stats>

	H	F	SM	M	GSM	AM	StM	Total
2014	6	334	1256	9286	455	280	355	11,972
2013	5	327	1243	9420	516	320	350	12,181

SCV-Section is responsible for **35 Organizational Units**; the name, GeoCode and the Section(s) to which they report (with SCV as their “parent” Section) are listed in **Appendix A**. These OUs do not include 4 Section Committees, each with a Chair, Treasurer, and a CBRS bank account and 5 Student Branches and 4 Student Branch Chapters, each with an ExCom. The student units are listed in **Appendix B**.

SCV-Section **initiated/Formed/ activated these OU** during 2014 and early 2015:

- San Jose State University Student Branch Signal Processing Society Chapter SBC0175B
- SEN039 CH06296 Sensors Council Chapter (SFBAC with SCV-Section as Parent)

SCV-Section **RE-activated this OU** during 2014 and early 2015:

- SCV-Reliability Society Chapter

SCV-Section **RE-activated this OU** during 2013- 2014:

- SCV-Signal Processing Society Chapter

SCV-Section **RE-activated this OU** during 2013:

- SCV-Women in Engineering Affinity Group

SCV-Section has improved the **collection and reporting of data for ExCom Officers**. We have requested modification of the vTools Officers list of positions reported to include Section Committee Chairs/Treasurers and Section/Chapter Webmasters to emphasize the importance of these functions and the need to communicate training and other issues by functional position.



Those pre-formatted queries by positions (with names) are available in the SAMIEEE query under **Shared Folders/IEEE Volunteer Queries/SFBAC/(X-SFBAC)-R603-Current Society Chapter AG Section Council-ExCom+Webmaster**

There are currently **160+ ExCom positions** listed (excluding the Student Units); these Student positions will not be reported in this nomination since the list is constantly changing.

SCV-Section reported **54 Bank Accounts** (CBRS and LOCAL) (Checking and Savings) active in 2014. As the largest IEEE Section, we were invited to participate in the Beta-Testing of the new NetSuite Bank_Upload_Template data entry process. We submitted **600+ templates** (1 template for each month/account) and also submitted our comments both during the testing period (December-2014 through February 2015 and after the completion of the submissions through NSBankUpload@ieee.org

Financial Initiative and Achievement: Based on prior years' experience with the Financial Reporting Process, our Section Treasurer initiated a **Preliminary Filing process** for the period 2014-01-01 through 2014-09-30 to enable the Section Treasurers (Chan and Aoki) to review the results of the instructions and to correct/clarify instructions or formatting. SCV-Section completed **90% of its Financial Reporting** of its 2014 activities by January 15, 2015 and **100% of its required filings** by 15 February 2015, the IEEE Finance deadline. The results of the SCV-Section **Preliminary Filing** process were summarized and reported to the San Francisco Bay Area Council (R603) Officers Training Meeting in January 2015 to accelerate the learning process for this new procedure.

SCV-Section OU (as reported in **vTools-Meetings** [<https://meetings.vtools.ieee.org/>] and **summarized in the 2014 and 2015 Chapter Rebate data distributed by MGA**) hosted or co-sponsored **214 Technical Meetings** in 2014 with a combined attendance of 12200 including 5773 guests; hosted or co-sponsored **21 Professional Development** meetings with a combined attendance of 787 including 341 guests. The 2014 Technical and Professional Development meetings are listed in **Appendix C. Those TM include** Seminars or short Conferences throughout the year. For instance, the MTT Chapter holds a short-course in Q2; NANO holds a full-day Symposium in May as well as a half-day Symposium in November; Computer Chapter holds an EDPS Symposium in Q1 and an NFIC Workshop at Stanford Univ in JQ3 ; CPMT held a Workshop with CES. Not yet reported for 2015 are Inter-Society/Association meetings such as the MEMs Chapter Co-Sponsorship of the MEPTEC workshop on MEMS.

The **new MEMs-Focussed SFBAC Chapter of the Sensors Council** (with SCV-Section as parent) held 9 meetings in its first full year of existence; attracting 350+ IEEE members and 340 non-IEEE guests. The **SCV-Women in Engineering (WIE)** Chapter held 8 meetings in 2014, attracting 300+ IEEE members and 345 non-IEEE guests. SCV-WIE contributed to the organization and participation in the 2014 and 2015 WIE-ILC (International Leadership Conference) located in San Francisco and San Jose; participants doubled from 375 to 740; SCV-WIE requested and received support from SCV-Section to fund Student scholarships. The **SCV-Signal Processing Society** held 9 meetings in 2014, attracting 400 IEEE members and 530 non-IEEE guests. The **SCV-Reliability Society** Hosted or Co-Sponsored 9 Technical Meetings in the last 12 months – an increase from 5 TM in 2013; in 2014, SCV-REL attracted 138 IEEE members and 133 non-IEEE guests. 2015 data has not yet been entered for March – July 2015.



In an innovative move, SCV-WIE initiated its IEEE-SCV-WIE-Corporate initiative with 5 companies in Silicon Valley (Cisco, ALTERA, Ericson, Intel, Samsung) with a company Executive member joining the IEEE SCV WIE Advisory Committee with more companies being recruited. This is a Chapter level program which fits the IEEE-Industry Relations initiative of the IEEE BOD. SCV-MEMS and SCV-REL received Chapter TM Refreshment funding for several meetings.

SCV-Section implemented its **educational/humanitarian initiative** with the Section being an IEEE GHTC2014 Financial Sponsor and contributor of key Organizing Committee members (Chair, Treasurer, Value Proposition, Papers Chair, Session Chair) to the Conference located in San Jose, CA; SCV-Section was encouraged by the performance of SCV-Section volunteers who contributed to the success of the previous GHTC2013 event. GHTC2014 results met the objectives of the Conference Chair (a volunteer from SCV-Section) because attendance increased over 2013 by 50 to 306; acceptable papers increased to 190; and (with firm financial oversight), the surplus increased by \$4000 over 2013 to \$36,000.. The final progress report to NASA (which granted this Conference \$38,210) is available from the IEEE Grants Office as NNX14AO25G. The GHTC2014 proceedings are in 2 forms: the USB electronic files of the presentations (and also available on IEEE Xplore <http://ieeexplore.ieee.org/servlet/opac?punumber=6958780>) and the videos of the keynote and plenary speakers listed in Appendix I of the NASA report. This successful effort, under the leadership of Chair Catherine Nelson, was recognized by the 2014 Director of Region 6 during the Conference:

To support **members education/training**, SCV-Section Chair contributed to the San Francisco Bay Area Council **SFBAC Officers Training** (January of every year) with presentations prepared in 2014 by

- * **SCV-Section** Chair on SAMIEEE (as a Chapter Management Tool)
- * **SCV-Section** Treasurer on Financial Reporting and review of New NetSuite Bank_Upload_Template data submission in addition to Financial Basics.

Also presenting in January 2015 was Marguerite Gargiula on vTools; we expanded the time for this presentation from the historical 20 minutes to nearly 2 hours for a more meaningful content.

SFBAC Officers Training Results in 2015:

104 attendees from SFBACouncil Territory

with additional attendees from Hawaii Section and Sacramento Valley Section.

Represented were Professional Chapters and 4 STB.

Presentations are archived on the web: <http://www.ieee-sfbac.net/training/>

The SCV-Section **supports its STB/SBC/SBA** by:

- appointing a Student Activities Committee Chair
- providing budget line item(s) for a subsidy to the STB/SBC/SBA when an annual Chapter report is presented at a scheduled Section ExCom meeting (\$300/student organizational unit)
- providing a budget line item for funding of special projects by student unit when presented in a "Project Funding" format
- providing funds upon request for STB activities that reach out to the University community and to the K-12 STEM community.



- Offering a standing invitation for STB/SBC/SBA requests for project funding/support (up to \$3000/project in past years)

SCV-Section projected **positive visibility to IEEE and its contributions** by

- Continuing the SCV Corporate Liaison Program that promotes the IEEE BOD initiative to engage the Industrial Community within which our members work.
- 30+ Companies are engaged
- 4 CLP lunch meetings were held in 2014 with an attendance of 20-25; majority of attendees are Liaisons from Companies

*See IEEE GHTC2013 and GHTC2014 information above.

In 2014, the Section **STEM initiatives** provided \$500 in cash awards to winners of local **Science Fairs**. In 2013-2014, the Section has supported the local Future City Design Competition with annual grants of \$2000. In 2013, the Section began supporting TOPS ([Teaching Opportunities for Partners in Science Committee](#)) based on a donation from the Tower Foundation. In 2008, the Section supported the Synopsys Silicon Valley Science Fair with six volunteers. SCV-CPMT Chapter in 2014 and 2015 has subsidized the EFUS Ohlone College STEM program (**Engineering for Female and Underrepresented Students: An Engineering for Humanitarian Needs Approach**) with an annual \$2500 grant. This relationship was initiated by contacts made at GHTC2013 and resulted in 60+ middle schoolers and their 10+ teachers and staffers in attendance..

SCV-Section members engaged in **Humanitarian issues** through local volunteers participation in:

- IEEE GHTC2013 and GHTC2014 and
- IEEE SCV SIGHT
- IEEE SIGHT (advisory committee)
- IEEE HAHC/HAC (Committee member or Chair named in 2014-2015)
- support of Chapter STEM through formation of a STEM Committee at the Section level (new initiative implemented in 2015)

SCV-Section participates in events of **other professional/technical organizations** such as:

- Engineering Week event organization (with Silicon Valley Engineering Council -yearly) www.svec.org with 250-300 attendees each year, with SCV-Section members constituting 25% of the attendees and 1 Section member each of the last 3 years being inducted into the SVEC Hall of Fame.
- Discover-E (SVEC and IBM)
- Under discussion are co-sponsored events with CASPA and CIE (local industry associations)

Supported SVEC booth at the 2014 & 2015 Maker Faire event

Co-Sponsored a Joint Event with ASME on Student Venture Capital Night in Oct. 2014

SCV-Section **facilitates interaction between Higher Grade IEEE members and IEEE Student Branch members** by:

- Requiring Annual and As-Needed STB/SBC/SBA reports (promoting interaction at ExCom)



- Offering a Standing invitation for STB/SBC/SBA requests for project funding/support (up to \$3000/project in past years)

NOTE: These STB/SBC/SBA presentations facilitate coaching of STB Officers in IEEE protocol and funding.

SCV-Section is facilitating **improved industrial relations** through

- SCV-Section Corporate Liaison Program (see 6 above)
- Broad provision of IEEE ORIMS Certificate of (Liability) Insurance to local providers
- of meeting venues to IEEE SCV Organizations
- Inclusion of local companies in GHTC2013 and 2014 programs and on GHTC organizing committees.
- Promoting "Rules of Use" of Company venues by IEEE OU. Several companies have commented that it "helps" to have IEEE volunteer to re-arrange furniture and clean up the premises prior to leaving.
- Considering SCV funding of projection screens and seating for small companies that wish to host SCV-Section meetings.

SCV-Section members and organization **received Section/Area/Region 6 awards in 2014** for

- Outstanding Engineer
- Outstanding Leadership and Professional Service
- Outstanding Educator [non-IEEE is permissible]
- Outstanding Chapter
- Outstanding Engineering Manager

SCV-Section uses or maintains or supports these **communications tools**:

- Electronic Newsletter (e-Grid) 2X per month www.e-grid.net
- Electronic IEEE SFBC Events Calendar www.e-grid.net/gcalendar 2-3 X per month
- SCV-ExCom ListServ 2-5 X per month
- E-Notice 3-4X per year primarily for voting issues.
- Section website: <http://ewh.ieee.org/r6/scv/index.html> (Continuing, updated weekly, with hot links to Chapter websites)

SCV-Section recruited **new IEEE members and new Section volunteers**.

- Appointed a Member Development Chair and approved funding for the first of those recruiting events in 2014.
- Appointed a STEM Committee Chair to integrate K-12 education and volunteer efforts in 2014-2015

SCV-Section has, in 2014, these **IEEE Milestone activities**:

Proposed/WIP : 6

- Apple MAC
4004 Micro
386 Micro
- PONG
"Demo" (PC Mouse)**
- Citation for CHM **

Note: ** in Proposal State

Approved by IEEE but not yet installed (6)



- Ampex
- Shockley Labs
- SPARC
- Apple I
Apple II
- Approved by IEEE and Installed
- PC Operating System
Dropped: (1)

What specific significant or distinguished contributions or achievements made you decide to submit this nomination?

SCV-Section in the face of challenges of SCALE of membership and Organizational Units continues to:

- Support nearly 12,300 Section members
- Fulfill the IEEE-BOD Industry Relation initiative
- Hold more than 200 Technical Meetings and 20 Professional Development meetings a year to provide value to our members
- Form and support new OU.
- Simplify/Improve Chapter management/operations tools such as SAMIEEE and vTools
- Investigate/Simplify/Improve IEEE Financial Reporting tools
- Contribute to and significantly improve GHTC2014 which resulted in a \$36,000 surplus to IEEE Regin6 and Sections
- Contribute to and significantly improve SFAC Officers Training
- Substantially support our STB/SBC/SBA efforts to recruit new members and officers
- Project positive visibility to IEEE and its contributions
- Increase participation in IEEE Humanitarian initiatives (HAHC, GHTC, SIGHT, STEM)
- Participate in events of other professional/technical organizations
- Facilitate interaction between Higher Grade IEEE members and IEEE Student Branch members
- Implement and improve industrial relations initiative -(IEEE BOD and Region 6)
- Have 4-5 recipients of awards each year for accomplishments
- Use, maintain and improve a variety of communications tools:
- Recruit new IEEE members and new Section* volunteers by changing its processes and people assignments.
- Proposed and pursue to completion, IEEE Engineering Milestones

Appendices:

Appendix A

35 Organizational Units, their Geocodes and the Sections to which they report, with SCV their “parent” Section:

SCV-Organizations and their GeoCode for vTools

AP003	CH06075	SCV/OEB/SF Jt. Section Chapter, AP03
C016	CH06084	SCV Section Chapter, C16



CAS04	CH06203	SCV Section Chapter,CAS04
CES008	CH06209	SCV Section Chapter,CE08
CIS011	CH06205	SCV Section Chapter, CIS011
<i>Consultants Network</i>	<i>CN60369</i>	SCV Section Chapter, CNSV
COM019	CH06087	SCV Section Chapter, COM19
CPMT021	CH06089	SCV/OEB/SF Jt. Section Chapter, CPMT21
CS023/SMC028	CH06090	SCV/SF Jt. Section Chapter, CS23/SMC28
E025	CH06212	SCV Section Chapter, E25
ED015	CH06083	SCV/SF Jt. Section Chapter, ED15
EMB018	CH06086	SCV Section Chapter, EMB18
EMC027	CH06091	SCV Section Chapter, EMC27
<i>Young Professionals</i>	<i>GD60369</i>	SCV Section Affinity Group,YP
IM009	CH06136	SCV Section Chapter, IM09
IT012	CH06279	SCV Section Chapter, IT12
<i>Life Members</i>	<i>LM60369</i>	SCV Section Affinity Group, LM
MAG033	CH06095	SCV/SF Jt. Section Chapter, MAG33
MBSS	R6036901	Monterey Bay Subsection
MTT017	CH06085	SCV/SF Jt. Section Chapter, MTT17
NANO042 *	CH06237	SCV/OEB/SF Jt. Section Chapter, NANO42
PE031/IA034	CH06156	SCV Section Chapter, PE31/IA34
PEL035	CH06185	SCV/OEB/SF Jt. Section Chapter, PEL35
PHO036	CH06096	SCV/OEB/SF Jt Section Chap,PHO36
PSE043	CH06208	SCV Section Chapter,PSE43
PV-CPMT/PELS/PHO	CH06280	SCV/SF/OEB Jt. Chapter, PHO36/PEL35/CPMT21
RA024	CH06245	SCV/OEB/SF Jt. Section Chap, RA24
RL007	CH06078	SCV Section Chapter, RL07
SCV-Section	R60369	SCV Section
SEN039 *	CH06296	SCV/OEB/SF Jt. Section Chapter, SEN39
SP001	CH06074	SCV Section Chapter, SP01



SSC037	CH06184	SCV Section,SSC37
TEM14	CH06292	SCV/OEB/SF Jt. Section Chapter, TEM14
VT006	CH06069	SCV/OEB/SF Jt. Section Chapter,VT06
<i>Women in Engineering</i>	WE60369	SCV Section Affinity Group, WIE

NOTE: SCV-Section Committees such as PACE, SIGHT, TechHist and K-12 have NEITHER a separate GeoCode NOR a separate ID for vTools but they do have a Committee Chair and ExCom as well as a CBRS bank account.



Appendix B

SCV-Sections' 5 STB and 4 Branch Chapters

- STB01751 San Jose State University Student Branch STB01751
San Jose State University Student Branch CPMT Chapter SBC0175A

San Jose State University Student Branch Signal Processing Society Chapter SBC0175B
- STB01761 Santa Clara University Student Branch STB01761
- STB01871 Stanford University Student Branch STB01871
Stanford University Student Chapter-EDS SBC0187A

Stanford University Student Chapter-WIE AG SBA01871
- STB95011 University of California Santa Cruz Student Branch STB95011
- STB02181 Naval Post Graduate School Student Branch STB02181 starting engagement later 2014



Appendix C

Professional Development meetings:

(section)	Corporate Liaison Program Lunch
(section) = PACE=	IEEE SCV PACE: Networking Dinner
CE08	Using Autonomous Robots to Predict and Prevent Crime
CE08	Humanitarian Technology Innovation in Silicon Valley: The Rise of Social Enterprise
CONSULTANTS NETWORK	Flash Memory Summit 2014:
CONSULTANTS NETWORK	Camera Array Technology Through Time
SP01	IEEE Tutorial on LDPC Decoding: VLSI Architectures and Implementations
SP01	IEEE SPS SCV Chapter Technical Meeting: Video Processing at YouTube
TM14 JT. SCV/SF/OEB	Value Innovation: And the Mindset of an Agile Engineer
TM14 JT. SCV/SF/OEB	Introduction to Kanban, a Broad Usage Agile Approach
TM14 JT. SCV/SF/OEB	Agile Portfolio Governance
TM14 JT. SCV/SF/OEB	Customer Development, Business Development, and Crossing the Chasm
TM14 JT. SCV/SF/OEB	Agile Project Management in a Waterfall World
TM14 JT. SCV/SF/OEB	Build Your Influence to Get Things Done
TM14 JT. SCV/SF/OEB	Silicon Valley leaders Share Their Creativity Insights
TM14 JT. SCV/SF/OEB	From Worst to Best: Transforming And Maintaining An Organizational Culture of Excellence
TM14 JT. SCV/SF/OEB	The Seven Wastes: Could You Be A Little Leaner?
WOMEN IN ENGINEERING	How to Grow Stronger Through Rapid Changes in Technology
WOMEN IN ENGINEERING	Intel's 2014 Professional Development Series



- WOMEN IN ENGINEERING Build Your Influence to Get Things Done
- WOMEN IN ENGINEERING Debugging the Gender Gap: Changing the Face of Technology
- WOMEN IN ENGINEERING Lunch with Qualcomm Women in Science and Engineering (WISE) group

Technical Meetings:

- AP03 JT.
SCV/OAK.E.BAY/SF Dielectric Resonator and Transparent Antennas
- AP03 JT.
SCV/OAK.E.BAY/SF Non-Foster Circuits for Antenna Applications – Theory and Design
- C16 OpenZFS: The Future of Open Source ZFS Development
- C16 A Technical Overview of VP9
- C16 Cleanroom Robots CS Silicon Valley Chapter
- C16 SoC Design Challenges Panel CS Silicon Valley Chapter
- C16 EDPS 2014 Symposium Program
- C16 EDPS CS Silicon Valley
- C16 Education Cloud CS Silicon Valley Chapter
- C16 NFIC CS Silicon Valley Chapter
- C16 Netflix's Video Workflow CS Silicon Valley Chapter
- C16 Authentication CS Silicon Valley
- C16 A New Nonvolatile Memory Technology - Persistence Pays Off
- C16 Agile Panel CS Silicon Valley Chapter
- C16 zSpace CS Silicon Valley Chapter
- CAS04 Terabit Optical Systems
- CAS04 DSP: Whence It Came and Where It's Going; A Tour for Non-Specialists
- CAS04 Presentations on 3D gesture recognition
- CAS04 Digital Delta-Sigma Modulators



CE08	IEEE CESoc, 2014 CES Download
CE08	The Internet as DIY connectivity for people and things (IoT)
CE08	The Cloud meets Bluetooth Smart
CE08	Beam Plus
CE08	10th year anniversary of CE Society
CE08	Gigabit PHY - Redstone PHY Physical Layer Engine
CE08	Wireless Internet of Things Cellular, WiFi, Bluetooth and Z-Wave Compared
CE08	The computational array camera
CE08	Bluetooth Smart and IoT ---- from vision to product
CE08	What's New in Mobile From Gamer-Focused NVIDIA SHIELD Products to Google Tango Giving Mobile Devices a Human-Scale Understanding of Space and Motion
COM19	"Open" Networking
COM19	Broadband Access Over Copper at Speeds Greater than 100 Mbps
COM19	Human Interface Technologies for Mobile devices: Today and the Future
COM19	Full Duplex Radios: From Impossibility to Practice
COM19	Data Analytics and the Personalization of Mobile Services
COM19	Connected Cars
COM19	BYOD: Enabling a mobile workforce
COM19	Joint Event with IEEE PACE SCV -Special IEEE SCV PACE Tutorial: LDPC Decoding
COM19	Billions of IoT Devices for Everyone (Joint Workshop with TiE)
COM19	SDN/OpenFlow & NFV
COM19	LTE-U: Just another wireless technology or a game changer?
COM19	Joint event with SPS SCV: Signal Processing-Based Technology
COM19	Entrepreneurship: Chips, Algorithms, and Startups
CONSULTANTS NETWORK	IEEE-CNSV-MAIN



CONSULTANTS NETWORK	IEEE-CNSV-SIG
CONSULTANTS NETWORK	IEEE-CNSV-MAIN
CONSULTANTS NETWORK	IEEE-CNSV-SIG
CONSULTANTS NETWORK	IEEE-CNSV-MAIN
CONSULTANTS NETWORK	IEEE-CNSV-SIG
CONSULTANTS NETWORK	IEEE-CNSV-MAIN
CONSULTANTS NETWORK	IEEE-CNSV-SIG
CONSULTANTS NETWORK	IEEE-CNSV-MAIN
CONSULTANTS NETWORK	ROLM: From Fruit Shed to Fortune 500
CONSULTANTS NETWORK	Human Cell Analysis: The Technology Behind the World's Most Common Diagnostic Test
CONSULTANTS NETWORK	IEEE-CNSV-MAIN
CPMT21 JT. SCV/OAK.E.BAY/SF	SCV-CPMT-TM- High-Performance Datacenter Platform: Using InP for Silicon Photonics
CPMT21 JT. SCV/OAK.E.BAY/SF	SCV-CPMT-TM- Probing Interfacial Contact via MEMS-based Micro Instrumentation
CPMT21 JT. SCV/OAK.E.BAY/SF	SCV-CPMT-TM- Power Semiconductor Packaging and System-on-a-Substrate Power Technology
CPMT21 JT. SCV/OAK.E.BAY/SF	SCV-CPMT-TM- Directions in Device Packaging for Mobile Applications
CPMT21 JT. SCV/OAK.E.BAY/SF	SCV-CPMT-TM- A Survey and Review of 2.5/3D IC Packaging Technologies
CPMT21 JT. SCV/OAK.E.BAY/SF	SCV-CPMT-TM- The Evolution of Laser Singulation
CPMT21 JT.	SCV-CPMT-TM- Inkjet Pillars and TSVs, PoP Package using TSVs



SCV/OAK.E.BAY/SF



CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-Seminar- Wearable Technology Seminar

CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-TM- The "Invisible" Package

CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-TM- PCB Design and Fabrication Process Variations for Embedding Passive and Active Components

CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-Seminar- 6th Annual Soft Error Rate (SER) Workshop

CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-TM- Thermal Management & Reliability of Power Electronics in Renewable Energy & Transportation Applications

CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-TM- Designing for the Internet of Things: A Paradigm Shift in Reliability

CPMT21 JT.

SCV/OAK.E.BAY/SF

SCV-CPMT-TM- Tools for Thermal Analysis: Thermal Test Chips

CS23/SMC28

JT.SCV/SF

OpenZFS: The Future of Open Source ZFS Development

CS23/SMC28

JT.SCV/SF

Cleanroom Robots for Semiconductor Manufacturing

CS23/SMC28

JT.SCV/SF

Technology Licensing "Converting IP Into Cash"

CS23/SMC28

JT.SCV/SF

Breast CT Scanner Imaging Advancement and Evolution at UC Davis

CS23/SMC28

JT.SCV/SF

Control of Multi-Robot Systems: From Formations to Human-Swarm Interactions

CS23/SMC28

JT.SCV/SF

Signal Processing Applications: Expanding our World, Bringing Us Closer - A Historical Perspective

E25

MOOCs in STEM: Exploring New Education

E25

Education Opportunities in Big Data

ED15 JT. SCV/SF

IEEE EDS-SCV "Product Level Reliability Challenges Originating from TDDb, BTI



and Variability"

ED15 JT. SCV/SF	IEEE EDS-SCV "The Roadmap to Success: 2013 ITRS Update"
ED15 JT. SCV/SF	IEEE EDS-SCV "System Level On-Chip ESD Protection"
ED15 JT. SCV/SF	IEEE EDS-SCV "Parallel Revolutions: How Breakthroughs in Electronics and Biology are Converging at the Molecular Scale"
ED15 JT. SCV/SF	IEEE EDS-SCV "Mesoscopic Devices and Their Impact on Product Yield: The Next Technological Challenge"
ED15 JT. SCV/SF	IEEE EDS-SCV "Graphene and Beyond-Graphene 2D Crystals for Next-Generation Green Electronics"
ED15 JT. SCV/SF	IEEE EDS-SCV 2014 Annual Symposium "Memory Technologies: New Frontiers"
EMB18	Using Technology to Successfully Solve the problems of the aging
EMB18	The Development of a Wearable Cardiopulmonary Sensor System
EMB18	The whole is greater than the sum of the parts: nano-patterned lipid particles for targeted drug delivery therapeutics
EMB18	Point of Care CD4 Testing and the BD FACSPresto
EMB18	Rotating Magnet Localization of Medical Devices
EMB18	The History of DNA Sequencing using Nanoscopic Pores in Membranes
EMB18	Modeling Health Behaviors Using Mobile Sensing
EMB18	Electrodes in the Brain - where do you want to put them and how do you get them there?
EMB18	Phys-Engi-Preneur: The Never-ending Metamorphosis
EMC27	The Impact of Cables and Connectors on Radio Frequency and Microwave Measurement Uncertainties
EMC27	The Effects of Compositional Changes and the Selection of Ferrite Materials for EMI Suppression and Signal Integrity Applications
EMC27	Really, Truly Understanding Shielding
EMC27	Advancements in Over-The-Air Testing of Multi-Format Wireless Devices
EMC27	Extraction of dielectric properties of PCB laminate dielectrics on PCB striplines



	taking into account conductor surface roughness
EMC27	Using Partial Discharge Waveforms to Diagnose Energized Medium Voltage (12kV – 34.5kV) Cables and Switchgear "
EMC27	Metamaterial-Based Gigahertz Common-Mode Filters for 10-Gbit/s and 25-Gbit/s Differential Signaling
EMC27	Radiated Emissions/Immunity of the NASA/Orion Mars/Moon Capsule "John Norgard. NASA/JSC
EMC27	Updates on CISPR 32 and CISPR 35 and Size of Devices to Be Measured at 3m
IM09	The Effects of Compositional Changes and the Selection of Ferrite Materials for EMI Suppression and Signal Integrity Applications
IM09	Review of Accurate Flow Measurement and Techniques
IM09	A Holistic Perspective on Medical Device Industry: Innovation, Development, and Commercialization
IT12	Introduction to Galois Fields and its application to error control
IT12	Information flow in Wireless Network: How similar is it to water flowing in pipes?
IT12	Let's Not Dumb Down the History of Computer Science
IT12	Information theory and signal processing for the world's smallest computational video camera
LIFE MEMBER	Preserving Media and Content at the library of Congress
LIFE MEMBER	The History of Robots
LIFE MEMBER	The Early History of Videotape Recording
LIFE MEMBER	The Use of Thorium in Nuclear Energy Generation
MAG33 JT. SCV/SF	FePt HAMR Recording Media Progress and Key Requirements
MAG33 JT. SCV/SF	History of the Magnetics and Control of Actuators in Disk Drives
MAG33 JT. SCV/SF	The New Era of Enterprise Storage
MAG33 JT. SCV/SF	Spin-Caloritronics and Spin-Transfer-Torque Switching in Magnetic Nanostructures



MAG33 JT. SCV/SF	Control of Magnetism with Oxide Hybrid Structures
MAG33 JT. SCV/SF	Silicon Spintronics
MAG33 JT. SCV/SF	Magnetic Materials in Medicine: Applications in Diagnosis, Management and Treatment of Disease
MAG33 JT. SCV/SF	Topological Effects in Nanomagnetism: From Perpendicular Recording to Monopoles
MAG33 JT. SCV/SF	IEEE Magnetics Society Santa Clara Valley Chapter monthly meeting
MTT17 JT. SCV/SF	Shields and Shielding
MTT17 JT. SCV/SF	Measuring Dielectric Constant with a Microstrip Ring Resonator
MTT17 JT. SCV/SF	Embrace Circuit Nonlinearity to get Transmitter Linearity and Energy Efficiency
MTT17 JT. SCV/SF	Non-Foster Circuits for Antenna Applications - Theory and Design
MTT17 JT. SCV/SF	Microwave and Millimeter Wave Power Amplifiers: Technology, Applications, Benchmarks, and Future Trends
MTT17 JT. SCV/SF	History and Theory of the Vector Network Analyzer
MTT17 JT. SCV/SF	An Introduction to Software Defined Radio for Microwave Engineers
MTT17 JT. SCV/SF	RF Aspects of Magnetic Resonance Imaging
NANO42 JT. SCV/OEB/SF	IEEE SFBA Nanotechnology Council Chapter noontime seminar
NANO42 JT. SCV/OEB/SF	IEEE SFBA Nanotechnology Council Chapter noontime seminar
NANO42 JT. SCV/OEB/SF	IEEE SFBA Nanotechnology Council Chapter noontime seminar
NANO42 JT. SCV/OEB/SF	IEEE SFBA Nanotechnology Council Chapter Full Day Symposium
NANO42 JT. SCV/OEB/SF	IEEE SFBA Nanotechnology Council Chapter Full Day Symposium
NANO42 JT. SCV/OEB/SF	IEEE SFBA Nanotechnology Council Chapter noontime seminar
NANO42 JT.	IEEE SFBA Nanotechnology Council Chapter noontime seminar



SCV/OEB/SF

NANO42 JT.

SCV/OEB/SF

IEEE SFBA Nanotechnology Council Chapter noontime seminar

NANO42 JT.

SCV/OEB/SF

IEEE SFBA Nanotechnology Council Chapter noontime seminar

NANO42 JT.

SCV/OEB/SF

IEEE SFBA Nanotechnology Council Chapter noontime seminar

NANO42 JT.

SCV/OEB/SF

IEEE SFBA Nanotechnology Council Chapter Half Day Fall Symposium Energy Storage

PE31/IA34

Unlocking the Value of Real-Time Facility & Energy Information in the Data Center

PE31/IA34

Tour of Levis Stadium

PE31/IA34

Smart Grid Interoperability and Security

PE31/IA34

Critical Power Solutions Utilizing Flywheel Energy Storage and Rotary UPS

PE31/IA34

Balancing the Grid & Winning Le Mans with Flywheel Energy Storage Solutions

PE31/IA34

Advanced Data Center Design

PE31/IA34

Model-Based, Real-Time Analysis of Facility Power

PE31/IA34

Nuclear Innovation for the 21st Century

PE31/IA34

SCV-CPMT-TM- Thermal Management & Reliability of Power Electronics in Renewable Energy & Transportation Applications

PE31/IA34

Lessons learned in electrical design of Levi Stadium and What you need to know about Smart Grid Security

PHO36 JT

SCV/OEB/SF

High-Performance Datacenter Platform: Using InP for Silicon Photonics

PHO36 JT

SCV/OEB/SF

Optics for wearable see through displays: a demonstration and description of Google Glass and similar displays

PHO36 JT

SCV/OEB/SF

Extreme Ultraviolet Photolithography

PHO36 JT

Adaptive Optics from Sky to Eye: Applications of Adaptive Optics in Astronomy,



SCV/OEB/SF	Ophthalmology, Communications and Biometrics
PHO36 JT SCV/OEB/SF	The Opto-Electronic Physics That Broke the Efficiency Record in Solar Cells
PHO36 JT SCV/OEB/SF	The James Webb Space Telescope: Science Potential and Project Status
PHO36 JT SCV/OEB/SF	The Energy Frontier of Particle Physics Research - Experimentation at the Large Hadron Collider
PHO36 JT SCV/OEB/SF	Four-Fold Resolution Increase in Scan-Free Single-Fiber Endoscopic Imaging
PHO36/PEL35/CPMT 21	Beyond Monitoring: Getting the Most out of Solar PV plants
PHO36/PEL35/CPMT 21	Flexible, Thin Film CIGS and Applications in Premium Markets
PHO36/PEL35/CPMT 21	PV Solar Power : How It Will Make a Difference
PHO36/PEL35/CPMT 21	Maturing Solar (PV) Technology in Need For a Face Lift - Time for PV 2.0
PHO36/PEL35/CPMT 21	Title: Building on 37 Years of Progress: NREL's Photovoltaic Research Program in 2014
PHO36/PEL35/CPMT 21	The SunShot Initiative: Reducing the Total Cost of Solar-generated Electricity
PHO36/PEL35/CPMT 21	Perspectives on Development and Commercialization of Early-State Distributed Energy Technologies
PHO36/PEL35/CPMT 21	The Solar Phoenix: How America Can Rise from the Ashes of Solyndra to World Leadership in Solar 2.0
PHO36/PEL35/CPMT 21	Assessing the Value of Solar PV Energy
PHO36/PEL35/CPMT 21	State of Residential Solar in California
PHO36/PEL35/CPMT 21	The Evolution of the Global PV Industry, Its Technologies, Prices, Applications and Business Model



PHO36/PEL35/CPMT 21	Quality of PV Modules Around the World: Qualification Testing Failure Rate Results from China, Germany, India, Japan, Korea and United States
PSE43	International Compliance: Asia Regulatory Changes and Challenges for 2014
PSE43	Fuses for Supplementary Protection: Safety versus Reliability
PSE43	Solar 101: What's Driving America's Solar Boom?
PSE43	Changes to the California Electrical Code
PSE43	IEC 62133 2nd Edition Certification Utilizing UN 38.3 Transport Test Reports & Taiwan's In-Country BSMI Testing
PSE43	How to Choose Circuit Protection Solutions that Deliver Safety and Reliability
PSE43	Consumer Product Field Failures - An Engineering Approach
PSE43	Laser Illuminated Projector Systems Update: Technology, Safety & Regulation
R07	Fuses for Supplementary Protection Safety Versus Reliability
R07	SCV-CPMT-Seminar- 6th Annual Soft Error Rate (SER) Workshop
R07	SCV-CPMT-TM- Thermal Management & Reliability of Power Electronics in Renewable Energy & Transportation Applications
R07	Designing for the Internet of Things: A Paradigm Shift in Reliability
R07	SCV-CPMT-TM- Tools for Thermal Analysis: Thermal Test Chips
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - Emergence of Trillion Sensors Movement
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - Two Technical Talks: FBAR Oscillators and Metal Eutectic Bonding
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - Coupled-Field MEMS Simulations
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - MEMS Wars: A New Hope
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - The Role of a Global Association in Advancing the MEMS Industry
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - MEMS on Alternate Substrates: A Case Study with Biometric Sensors



SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - RF MEMS: From Research to Products
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - MEMS enabled microscopes for in-vivo studies of cancer biology
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - Innovative Pressure Sensing Solutions
SEN39 JT. SCV/OEB/SF	IEEE SFBA MEMS & Sensors - Tools for Thermal Analysis: Thermal Test Chips
SP01	IEEE SPS SCV Chapter Technical Meeting: Production & Post-Production Video Compression Standards Delivering Awesome Images for Television & Digital Cinema
SP01	IEEE SPS SCV Chapter Technical Meeting: Digital Signal Processing: Core Differentiation in Early Stage Companies
SP01	IEEE SPS SCV Chapter Technical Meeting: Bayesian Methods for Sparse Signal Recovery and Compressed Sensing
SP01	IEEE SPS SCV Technical Meeting: Breast CT Scanner Imaging Advancement and Evolution at UC Davis
SP01	IEEE SPS SCV Technical Meeting: Signal Processing Applications: Expanding our World, Bringing Us Closer - A Historical Perspective
SP01	IEEE SPS SCV Chapter Technical Meeting: Intelligent Personal Assistants and Signal Processing Challenges
SP01	Signal Processing-Based Technology Entrepreneurship: Chips, Algorithms, and Startups
SSC37	Digital Analog design, challenges and trend
SSC37	IEEE SCV SSCS and PACE Short Course on "Past, Present and Future of DRAM Circuits and Device Specifications"
SSC37	Terahertz and Millimeter-Wave Frequency Generation and Synthesis in Silicon
SSC37	Reconfigurable Radio-Frequency Transceivers
SSC37	Miniaturized Passive Radios for Wireless Tagging and IoT Applications
SSC37	Back to the Future: Analog Signal Processing



VT06 (JT. SCV/OAK.E.BAY/SF)	Development of an Extremely Efficient Wireless EV Charger
VT06 (JT. SCV/OAK.E.BAY/SF)	Vehicular Communications and Networks Employing Cognitive Radio
WOMEN IN ENGINEERING	HTML5: Programming the Compute Continuum. Sponsor: IEEE-CNSV. Co-sponsor: SCV WIE - SANTA CLARA VALLEY WOMEN IN ENGINEERING
WOMEN IN ENGINEERING	Probing Interfacial Contact via MEMS-based Micro-instrumentation
WOMEN IN ENGINEERING	Cisco: Women of Impact Birds of Feather
WOMEN IN ENGINEERING	Directions in Device Packaging for Mobile Applications
WOMEN IN ENGINEERING	Disaster Response Communications: What Works & What Doesn't. Are you ready?
WOMEN IN ENGINEERING	The Impact of Frugal Innovation on Emerging Markets through Social Enterprises
WOMEN IN ENGINEERING	IP and Open Source Making the Conflict Constructive
WOMEN IN ENGINEERING	Intelligent Personal Assistants and Signal Processing Challenges
YOUNG PROFESSIONALS	A look into Wearables through Google Glass

Other Organizational Units

There are a few other OUs such as an engineering honor society. There has not been any activity to warrant an award.

