AICN Newsletter

The Quarterly Publication of the Alliance of IEEE Consultants Networks

AICNCC Committee News

Hermann Amaya: New Chair of the Alliance of IEEE Consultants' Networks Coordinating Committee

The new chair of the Alliance of IEEE Consultants Networks Coordinating Committee (AICNCC) is Hermann Amaya. Hermann is an IEEE senior member, and also chair and founder of the IEEE Florida West Coast Section Consultants' Network Affinity Group since its inception on 31 March 2009. Amaya was appointed to AICNCC in October 2012. His dedication to the local chapter has been focused on developing the members' consultants businesses, by providing them with a series of conferences and chats by subject matter experts in consulting law, setting up a corporation, working with the federal government, and professional licensure, among many other topics geared toward assisting consultants in successfully setting up and maintaining their practices.

Amaya has been an independent consultant for more than 13 years, and he is currently directing Amher Corporation, a firm delving into systems tests, automatic test equipment, power, purchasing for Latin America, and bids and proposals for the federal government. The U.S. Army Corps of Engineers, the U.S. Air Force, the U.S. Navy and the State of Florida are among the corporations customers.

In his personal time, Amaya volunteers with Pinellas County Schools, as a trilingual (English, Spanish and French) tutor, having been honored with the 2012 Friend of World Languages Award. Most recently, he was selected as one of five finalists for the Superintendent's Unsung Hero Awards, for dedicated



service in support of his wife's teaching career.

Amaya succeeds William R. Kassebaum as AlCNCC chair. Kassebaum served three years as chair, and will remain on the committee as past chair. Remaining members of AlCNCC are Larry Nelson of the Boston Section IEEE Consultants Network; Bill Grist, chair of the Computer Society for the Foothill Section, co-chair of the Employment Network, and a member of the Orange County (Calif.) Consultants Network and Los Angeles Consultant Network; and Gary Blank, past AlCNCC chair and IEEE-USA president-elect.

National Consultants Network

IEEE Consultant Members Can Now Join the IEEE Consultants Network

IEEE consultants now have a new option that will provide additional resources and networking opportunities. By joining the IEEE Consultants Network, IEEE members will receive the Alliance of IEEE Consultants' Networks (AICN) quarterly newsletter, invitations to IEEE-USA consultant

webinars, and they will receive special AICN information announcements. Also, by joining, we will be able to match you with your local consultants' networks. If there is not one near you we will be able to assist in creating a new

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consultants network in your area. You can sign up when you renew your <u>IEEE membership</u>. Just look for the *Special Interest Groups* section on the renewal form and find IEEE Consultants Network. Add this to your shopping cart, at no cost, and you will become part of the IEEE Consultants Network. You can also share this information with other consultants who plan to join IEEE. This option is also available to new members who are signing up to join IEEE for the first time.

Additional Support for Consultants

As you may know, IEEE-USA also provides consultants with a premium consultants' package

for \$99 a year. This package provides you with:

 One listing in the IEEE-USA Consultants Database searchable by potential employers

- · Free eBooks on Consulting
- Free exclusive webinar on consulting

The IEEE-USA Consultants Database is an online searchable database populated with independent engineering consultants. Businesses and clients can search this database for independent engineering consultants like you. It provides a variety of searching methods such as keyword search, technical category search or an advance searching methods where businesses can use location, expertise and other technical categories to refine their search.

Consultants who have a profile listing in this online database are independent engineering consultants, with expertise in many different fields of engineering. Please visit the IEEE-USA Consultants Database. This tool enhances your online presence, makes it easier to network with fellow consultants, and

provides additional opportunities for potential clients to find you.

How Do You Sign Up?

You can sign up for the IEEE-USA Consultants Database by visiting: www.ieeeusa.org/business and click "Register." (In the future, we're working so you will be able to sign-up for an IEEE-USA Consultants Database listing at the same time when you're renewing your IEEE membership.) Please contact me Daryll Griffin (d.r.griffin@ieee.org) with any questions you may have about IEEE Consultants Network or IEEE-USA's Consultant database.





Building Your Career

Advance Your Career With the IEEE Wireless Communication Certification

THE DEADLINE FOR THE NEXT EXAM PERIOD IS FAST APPROACHING

By Elena Neira

This blog post was originally posted on the <u>The Institute</u> website on 6 February. It is reprinted here with permission.

With new mobile technologies constantly being introduced into the marketplace and with increased competitiveness in the job market, many professionals are asking themselves, "What can I do to stand out?" and "What talent are employers seeking to bring on board?" For wireless communication professionals, earning the IEEE Wireless Communication Engineering Technologies (WCET) Certification, offered by the IEEE Communications Society, can be the answer. It was for me.

One of the most important parts of going through the WCET certification process was to sharpen my skills and demonstrate up-to-date qualifications for the job I wanted to land. Successfully passing the IEEE WCET exam allowed me to add the IEEE Wireless Communications Professional (WCP) credential to my résumé. This helped me stand out as an expert in the field, and helped me land a new job. Because I believe in the WCET program, I serve as the WCP liaison to the

IEEE Communication Society, and lead networking, professional development, and job search activities for other IEEE WCPs.

Earning the IEEE WCP credential can also help you demonstrate that you have the necessary knowledge, practical problem-solving skills, and can apply them in real-world situations to develop and implement high-quality deliverables. At the rate in which the wireless industry is growing, there's an ever-increasing need for qualified and experienced professionals on which companies can rely to improve and create new products, reach new markets, and advance to nextgeneration technologies. Those who earn the IEEE WCP credential have effectively demonstrated their breadth of knowledge by successfully passing the certification exam, which covers these seven areas of expertise: RF engineering, propagation, and antennas; wireless access technologies; network and service architecture; network management and security; facilities infrastructure; agreements, standards, policies, and regulations; and fundamental knowledge.

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from today's engineer

To P.E. or Not to P.E.?

By Steven F. Barrett, Ph.D., P.E.

In the late 1990s, like many mid-career engineers, I pondered whether I should go become a licensed professional engineer (P.E.). The entire process was a bit of a mystery. After a satisfying and successful career as a commissioned officer in the U.S. Air Force, I was beginning to make plans for active duty "retirement,"

and a second academic career. At the time, I was serving as a faculty member in the Department of Electrical Engineering at the U.S. Air Force Academy (USAFA) in Colorado Springs.

Read the rest of the article in the July 2009 issue of *Today's Engineer* at: http://www.todaysengineer.org/2009/jul/PE.asp

RFP-EZ A Technology Marketplace That Everybody Loves

Let's Make a Deal: Introducing RFP-EZ

The U.S. Small Business Administration (SBA) is taking the wraps off of a new experiment in government contracting: RFP-EZ. This project is an exciting partnership between the US Small Business Administration and the White House's Presidential Innovation Fellows. The intent is a simple one—make it easier for companies to sell to the government, and easier for the government to buy from companies.

How do I use RFP-EZ?

If you've never done business with the federal government before, you don't have to worry about getting on any schedules, or dealing with a cumbersome registration process. Through RFP-EZ, a company can easily search for an opportunity, see a statement of work, and bid for a project--all on the RFP-EZ site.

You can register and start bidding now. Go to: http://rfpez.sba.gov.

What kinds of projects are available for bid?

You can bid on a variety of contracts, ranging from video transcription, to web design, to web application development. Projects range from \$3,000 to \$150,000.

How can I give feedback to the RFP-EZ process?

The SBA is committed to listening to small business owners, taking their ideas, and turning them into solutions. As the SBA learns more from this experiment, they hope to expand procurement opportunities to other categories. RFP-EZ will be open for a limited time, as the SBA measure its impact, and determines how to best move forward. It's important that you give the SBA any feedback, comments, or new ideas you may have. Follow them on Twitter opencetaffeed, or email rfpez@sba.gov.



The AICN is now on Facebook. Check us out at: http://www.facebook. com/pages/IEEE-Consultants-Network/116356868419773



iPad/iPhone users, download the IEEE-USA in ACTION app from the iTunes store. Read reviews, get customer ratings, see screenshots, and learn more about IEEE-USA in ACTION.



Free IEEE-USA E-Book

IEEE-USA's Free Member E-Books Focuses on Strategic Thinking, Leadership

As a special benefit in February, IEEE-USA is offering free to members the E-Book, <u>Strategic Thinking:</u> <u>A High Tech Strategy Guidebook</u>, by IEEE Senior Member Jim Blakley.

This how-to guide is designed to show the processes and frameworks that enable strategists to create and implement good strategy. It is structured into three sections reflecting the strategic process: analysis, synthesis and action.

In March, members can download for free <u>Launching</u> <u>Your Career: A Practitioner's Guide to Leadership</u>. This E-Book provides a starting point for those interested in becoming more effective leaders by stimulating thought, motivating practice, and inspiring



reflection.

To purchase IEEE Members-only products and to receive the member discount on eligible products, members must log in with their IEEE Web Account.

Call for Authors

IEEE-USA E-books seek authors to write an e-book or a series on career guidance and development topics. If you have an idea for an e-book that will benefit members on a particular topic of expertise, email your proposal to IEEE-USA Publishing Manager Georgia C. Stelluto at g.stelluto@ieee.org, and IEEE-USA E-Book Chair Gus Gaynor at g.gaynor@ieee.org.

Public Policy

IEEE-USA Partners with SmartBrief for Weekly Newsletter

IEEE-USA has formed a new partnership with *SmartBrief*, a company specializes in hand-picking the most relevant and important news items of interest to IEEE's U.S. members, and summarizing them with links to the original sources.

IEEE-USA SmartBrief is replacing IEEE-USA's *Eye on Washington* publication, which focused on political activities affecting engineers. Since *SmartBrief* has such a vast network of publications partners, AICN has requested that this new publication include news on consulting from time to time. The 8 November 2012 issue included an article on *Hiring a Tech Consultant?*

<u>Sign up</u> today for *IEEE-USA Smart Brief* to finish reading this and other exciting stories.



Hiring a tech consultant? Think about this first

Hiring an IT consultant can be a good way for a company to temporarily bolster its workforce for project-specific tasks, but it's not as simple as just adding a desk, experts say. To avoid legal issues, companies need to determine whether a consultant is an employee, or an independent contractor... more at CIO.com (11/7)



"Advance Your Career With the IEEE Wireless Communication Certification" continued from page 3

RELIABLE EXPERTISE

Having the IEEE WCP credential after your name designates you as a reliable, intuitive, and forward-looking professional adept in the major areas of wireless communication. "WCET certification distinguishes me as a wireless expert," says Jeff Smith of Cisco Systems, a WCP credential holder, about the program. "For customers, the certification helps provide a level of trust that they are being advised by a certified wireless engineer."

Going through the certification process can also be a way to learn about one's areas of strength and better understand those areas in which further development is needed. Individuals who have gone through the steps to prepare for the certification exam gain a better understanding of their current skill set and are better equipped to communicate their capabilities to others. I personally found that learning about my skills and knowledge after going through the certification process gave me even more confidence to follow my career goals and helped me better communicate my skills to colleagues and employers.

INTERNATIONAL CREDIBILITY

According to the *Wireless Telecommunications Services: Global Industry Guide,* "In 2016, the global wireless telecom services market is forecast to have a volume of 5.6 million subscribers, an increase of 21.7 percent since 2011." The Asia-Pacific region will account for the largest percentage of that market said the report.

Due to the transnational nature of mobile technologies, the IEEE Communications Society steering committee that oversees the program and an industry advisory board consisting of members from around the world work to keep it aligned with the latest technical advancements and industry needs worldwide. Therefore, another advantage of being an IEEE WCP is that your knowledge is not limited to U.S. markets because you learn about global opportunities as well.

Also, the IEEE Communications Society has partnered with organizations like the Mobile Computing Promotion Consortium of Japan and the National Taiwan University

of Science and Technology of Taiwan, whose goals include better positioning their organizations' constituents to address the needs of the wireless communication industry.

GETTING CERTIFIED

The IEEE WCET certification exam is offered twice a year, during the second and third quarters. The next testing window will be open from 7 April to 4 May 2013 but candidates must apply to take the exam by 22 March 2013. Testing locations are at Prometric centers around the world, so candidates can choose the location most convenient for them. I personally found the application process simple to complete and locating a testing facility nearby was easy. On the WCET website are additional details about the exam and how to apply. It also includes a number of resources to support candidates in preparing for the exam, such as a practice exam and the 2013 Candidate's Handbook. You can also download the IEEE WCET Android mobile app to get access to an up-to-date calendar, podcast, videos, and more. Search for "IEEE WCET" on Google Play. An iPhone version will be released soon.

Candidates can also connect with others preparing for the exam and those who are already IEEE WCPs through the IEEE WCET Group on LinkedIn. I'm a member of the LinkedIn group and find it to be a great place to connect with others and grow my professional network. In addition, ComSoc Training lists online and in-person training courses on various wireless related topics that can help you sharpen your skills in the communications field. Though none of the courses offered cover the contents of the WCET certification exam, they can be helpful in helping you prepare. ComSocTraining even offers a special training and certification exam seat package for one price, making it more affordable.

Neira is the IEEE Wireless Communication Professional Liaison to the IEEE Communications Society Steering Committee.



2nd Quarter 2013

AICN Newsletter

The Quarterly Publication of the Alliance of IEEE Consultants Networks

Report from AICNCC Chairman Hermann Amaya

AICN Meeting To Address a Number of Issues Confronting IEEE Consultants

The Alliance of IEEE Consultants Networks Coordinating Committee (AICNCC) has been meeting regularly over the past few months, and had an in-person meeting on 18 May in St. Petersburg, Fla. At this meeting, AICNCC addressed several topics, but most importantly, they discussed the state of the IEEE-USA Consultants Database. The Committee believes this Database provides businesses the ability to do nationwide searches for consultants, to assist them in completing their projects. The Committee is looking at ways to improve the service focusing on enhancing the database's capabilities so businesses can find IEEE Consultants more easily.

Specifically, the Committee brainstormed ideas on

ways to increase exposure of this service to businesses, as well as increase the IEEE-USA Consultants Database subscribership. AICNCC members now have several ideas on how to achieve these goals, and will be looking to implement them in the upcoming months. The Committee also welcomes suggestions from IEEE members. AICNCC will report on the progress in future issues of the AICN newsletter.

AlCNCC's goal is to facilitate networking capabilities and provide professional assistance and resources to self-employed U.S. IEEE members, who are technical consultants practicing their professions independently.

Consultants Network News

AICN Welcomes a New Network in Michigan

The Alliance of IEEE Consultants Networks Coordinating Committee (AICNCC) congratulates and welcomes Sharan Kalwani, and the IEEE Southeastern Michigan Section Consultants Network, on forming an Affinity Group.

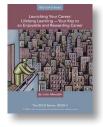
This newest Consultants Network became official on 10 April. If you want to wish them well, check IEEE-USA's Web site for contact information for the Southeastern Michigan Section Consultants Network. If other groups want to form a Consultants Network, IEEE-USA's Web site also contains step-by-step instructions about how to become a formal network. We encourage all Consultants Networks to register as *Affinity Groups*. After a group forms a network, they can take advantage of IEEE's branding and resources, and also qualify for funding through IEEE Section rebates.

If IEEE members belong to a Consultants Network, but don't see their Network's contact information on our IEEE-USA Consultants Network listing, please contact Daryll Griffin at d.r.griffin@ieee.org.



Free IEEE-USA E-Books for Members in May and June: Launching Your Career— Book 4: Lifelong Learning—Your Key to an Enjoyable and Rewarding Career (1-31 May); and The Best of Today's Engineer: On Career Transitions (1-30 June)

As a special benefit to IEEE members for the month of May, IEEE-USA is offering a free e-book, Launching Your Career– Book 4: Lifelong Learning–Your Key to an Enjoyable and Rewarding Career, written by former IEEE-USA President John Meredith.

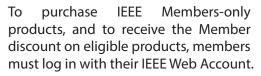


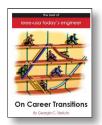
This fourth e-book in the series is a guide for engineering students who are about to begin their careers, or the engineers just launching their careers. Meredith shares a number of practical ideas and thoughts that can help make lifelong learning a priority in pursuing an exciting and rewarding career.

Launching Your Career–Book 4: Lifelong Learning–Your Key to an Enjoyable and Rewarding Career, can be downloaded at http://www.ieeeusa.org/communications/ebooks/files/47skc0ie/Launching-Your-Career-Lifelong-Learning.pdf, for free to IEEE members. The nonmember price is \$7.99.

In June, IEEE-USA will offer *The Best of Today's Engineer:* On Career Transitions, a collection of articles that can

help you handle almost any situation you might face in your career, whether you're changing projects, employers, or career paths.





To learn about the many benefits of IEEE membership, visit http://www.ieee.org/membership_services/ membership/join/.

Call for Authors

IEEE-USA seeks authors to write an e-book, or a series of e-books on career guidance and development topics. If you have an idea for an e-book that will educate other IEEE members on a particular topic of expertise, email your e-book proposal to IEEE-USA E-Book Chair, Gus Gaynor, at g.gaynor@ieee.org and to IEEE-USA Publishing Manager, Georgia C. Stelluto, at g.stelluto@ieee.org.

IEEE-USA SmartBrief Highlights Story on Employer Needs

IEEE-USA SmartBrief provides summaries and links to relevant and important news items of interest to U.S. IEEE members. Published every Thursday, IEEE-USA Smart Brief replaces *IEEE-USA's Eye on Washington*, which focused on political activities affecting engineers.

The Alliance of IEEE Consultants Networks Coordinating Committee (AICNCC) has asked Smart Brief to include news items that may be of interest to engineering consultants. The 28 February issue of IEEE-USA SmartBrief included a story on engineering skills employers are seeking. AICNCC believes consultants will find the following brief informative:

<u>Sign up</u> today for *IEEE-USA Smart Brief* to finish reading this and other exciting stories.

Big Data, Ruby on Rails skills are cited among hardest to

Technology firms are having a difficult time finding engineers who are proficient in Ruby on Rails, Big Data and mobile technology, Keith Cline writes. Cloud computing and enterprise software are two more areas that firms struggle to find talent for, he writes.

Inc. online (free registration)

(2/26)





...articles from the institute

■ Building a Better Consulting Practice

By JOHN R. PLATT 6 May 2013

Bruce Katcher is passionate about consulting. "I don't think anybody should have to work for an employer," says Katcher, founder and executive director of the Center for Independent Consulting, and author of *An Insider's Guide to Building a Better Consulting Practice* [American Management Association, 2010]. "If you have skills, you don't need any boss other than yourself. You can own your life."

Katcher took his message to a recent meeting of the IEEE Boston Section's Consultants Network, where engineers and computer scientists gathered to learn about the best business models and marketing methods for a consulting practice. Consultants Networks help IEEE members establish themselves as independent contractors.

Read the rest of the article in the <u>6 May issue</u> of *The Institute*.

■ Legal Experts Offer Strategies for Entrepreneurs

By JOHN R. PLATT 5 April 2013

A new company can be doomed, if the right legal, financial and intellectual property protections are not put in place at the very start. That was the message from experts speaking on *Legal and Patent Strategies for Entrepreneurs*, a recent event jointly sponsored by the IEEE Boston Section's <u>Consultants Network</u> and <u>Entrepreneurs Network</u>. The Consultants Network helps IEEE members establish themselves as freelance or independent contractors, while the Entrepreneurs Network supports members who want to go into business for themselves.

Read the rest of the article in the <u>5 April issue</u> of *The Institute*.

Dismal Unemployment Numbers for Electrical Engineers

By ANIA MONACO 24 April 2013

Despite talk of a recovering economy in the United States, unemployment numbers for electrical engineers have become significantly worse. That's according to an <u>analysis of U.S. Labor Department data by IEEE-USA</u>.

Electrical engineering jobs went down by 40,000 in the first quarter of the year, with the unemployment rate rising to 6.5 percent, according to the analysis. In 2010 and 2011, electrical engineers' unemployment rate was just 3.4 percent, according to the report.

"Seasonal fluctuations are normal, but the first quarter unemployment spike is alarming," said Keith Grzelak, IEEE-USA vice president of government relations.

Read the rest of the article in the 24 April issue of The Institute.

AICN Newsletter The Quarterly Publication of the Alliance of IEEE Consultants Networks 2nd Quarter 2013

A Letter from IEEE-USA President-Elect Gary L. Blank

Self-Employed Consultant Elected IEEE-USA President for 2014

FEEDFORWARD

Dear Fellow IEEE Consultants/Members,



Thank you for your show of confidence in electing me to the office of IEEE-USA President 2014. I came up through the ranks—first, as the founder and chair of the IEEE Chicago/Rockford Consultants Network; then, as the chair of the Alliance of IEEE Consultants Networks (AICN). After that, I spent a couple of years as member-at-large on the IEEE-USA Board, and then as the vice-president of Career and Member Services. In 2014, I will be IEEE-USA's President.

I have been a consultant in industry for many years, specializing in controls, electronics and power; and I have provided consulting services for more than 40 client corporations. I also have many years of experience as a full-time university professor of electrical engineering.

IEEE-USA has been a cornerstone in my professional career, and I really value being a U.S. IEEE member. It has kept me technically current in my field. As U.S. IEEE members, we have access to many IEEE publications, and dozens of IEEE-USA E-Books, many of which are free to members. Go to http://www.ieeeusa.org/communications/ebooks. I have also learned so much about modern engineering software through my volunteer efforts at IEEE-USA.

IEEE-USA has an excellent selection of career resources, including a job site at http://careers.ieee.org/.

For independent self-employed U.S. IEEE members, there are now more than 37 IEEE-USA Consultants Networks--and this number continue to grow. I have networked, not only with my own Network members, but also with members of other Networks—and these interactions have opened many doors. http://ieeeusa.org/business

The <u>IEEE-USA Consultants Database</u> has provided several opportunities and clients for me. We have bundled our IEEE-USA Consultants Database service; so now, if you have a listing in the database, you will receive an invitation to an exclusive annual webinar for consultants, and a new IEEE-USA E-Book. If you are paying about \$200 a year for membership dues, you can easily recover all of this expense, and much more. <u>Member discounts</u> are available for car rentals, Dell products, HP products, FedEx, software, moving and storage, Wiley publications, to name a few. IEEE has done the research and shopping for us. They have secured excellent sources at great prices.

Being self-employed, I needed to get my own insurance policies. I have obtained many of these through IEEE: life insurance, disability insurance, health insurance, professional liability insurance, auto insurance, home insurance, are just a few you can consider.

FEEDBACK

With the changes in industry and the economy, more members are becoming self-employed consultants. On their membership renewal forms, more than 17,000 members have indicated their involvement and interest in consulting.

There is much to be done to improve IEEE-USA; and with your help, I will pursue this now, and in 2014, when I am IEEE-USA President. Will you please tell me what you like about IEEE-USA? Also, what you would like to see changed, removed, added, or expanded? What more do consultants want IEEE-USA to do? I will respond by thanking you for communicating with me. Your feedback is very valuable. It helps us to know what you (the member) want.

E-mail me at g.l.blank@ieee.org. Briefly describe four things about IEEE-USA you like, and four things about IEEE-USA you would like to see changed, or added. In your e-mail's subject line, simply put IEEE-USA. You may include your name, region, section and phone number-- but those are optional.

Dr. Gary Blank is the IEEE-USA President-Elect 2013, IEEE-USA President 2014. He is active in both industry and academia.



AICN Newsletter

The Quarterly Publication of the Alliance of IEEE Consultants Networks

3RD QUARTER 2013

Joining the IEEE-USA Consultants Database Just Became Easier

The IEEE-USA Consultants Database is a central location where consultants from across the country can place profiles containing their expertise and contact information and where business employers can come to find independent electrotechnology consultants.

In September, teams from IEEE and IEEE-USA made it easier for IEEE consultants to subscribe to this great service. Now, when IEEE members renew their **IEEE membership**, they have the ability to join, or renew their subscription to, the IEEE-USA Consultants Database.

When joining or renewing your IEEE Membership, go to the Special Interest Groups section of the Memberships and Subscriptions Catalog, and

select IEEE Consultants Network Membership Premium. This step will allow you to enroll in the database, as well as pay the \$99 subscription fee, at the same time you pay for your IEEE membership.

After you subscribe there is no longer a need to create an additional username and password. You can use your IEEE Account username and password to log-in to the database and view your profile. Please note you have the ability to make your profile stand out by adding your specialties and keywords, so clients searching the database can find you.

Business employers searching for electrotechnology consultants will easily be able to find the consultants they need in the database due to



many unique features. Having a profile in the IEEE-USA Consultants Database allows national companies to find consultants wherever they are; and with an annual listing fee of only \$99, just one referral will pay for the listing.

AICNCC and the IEEE Consultants Network of Chicago/Rockford To Collaborate on an All-Day Workshop

On 26 October, members of the Alliance of IFFF Consultants' Networks Coordinating Committee (AICNCC), and members of the local consultants network in Chicago, will come together to conduct an all-day workshop on different aspects of consulting.

Starting off the day, AICNCC member, Bob Krause, will conduct an interactive workshop on improving consultants '

networking skills.

Chair of the IEEE Consultants Network of Chicago/Rockford, Ben Miller, will address the need for licensure in the consultant community.

William R. Kassebaum, consultantturned-entrepreneur, will share his experiences about going through this process.

These topics are just a few of those

to be addressed in the day-long workshop.

Register Today!

If you have questions, please contact Daryll

Griffin at d.r.griffin@ieee.org. There is a \$40 registration fee for IEEE members.



JEEE*USA



War Stories: Computer Backups in the Early Days

BY LARRY G. NELSON, SR.

This article is the first in a series of war stories, about consulting experiences that I hope will entertain you, while showing what can happen in the wonderful world of consulting. These events actually happened to me over 30+ years of consulting for diverse industries at a spectrum of companies. Why are such stories important to all of us? I like to think we can all learn from our mistakes. If learning from our mistakes is good, think of how great it is to learn from other's mistakes. I have divided some my experiences into categories, and changed just enough details to protect the guilty...

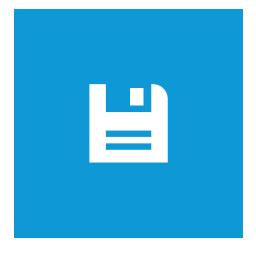
One client made her backups, just as I had instructed ... but after the disk had an error. I had set up the word processor's templates, and a special process for a printing company to help them with their direct marketing. A database was feeding a word processor, doing customized letters, on a daisy wheel printer. This progression allowed them to give the impression every letter was personally typed and signed, resulting in a very effective direct mail campaign for them.

They were typing in the names and addresses into the database from business directories they had purchased. This scenario took place just after the TRS-80 Model 1 computer from Radio Shack was introduced, and computers were very uncommon in small businesses. I needed to set up and train the office staff to use this scary new technology. I did a lot of hand holding, and one-on-one training. I viewed the given procedures in action to make sure they were followed properly. After I had answered all the questions, and everyone had entered a few disks worth of data with no problems, I left them to their project.

But one young woman didn't fully understand the use of backups. She filled a disk with names, and then had a disk error. She proceeded to make a backup, because she knew a backup copy could save her, if an error occurred. The young woman was upset to find her backup copy had the same error as the original.

Right idea. Wrong sequence.

When you solve a client's problems, you need to be very sure they know it is solved. Everyone involved must understand all the parts to the solution. Step-by-step instructions are an invaluable tool. Providing the correct sequence, with examples to show what they should see, as well as the appropriate response, can make



all the difference in the world.

I was able to help them recover most of the data, but it would have been so much easier if backup copies had been made after every half hour or hour of work. A simple checklist can facilitate any procedure.

You are more valuable to a client when you are proactive and cover all the bases. If it appears you withheld information to make them rely on you, the client will probably look for someone else.

As a Consultant, your biggest assets are **trust** and your **reputation**.

Larry G. Nelson, Sr. can be contacted at <u>L.Nelson@ieee.org</u>; or at Nelson Research at http://www.mchipquru.com/.





Just Released: 2013 IEEE-USA Consultants Fee Survey Report

IEEE-USA has conducted surveys of the compensation of IEEE's U.S. members since 1972. Separate surveys focusing on the compensation of consultants were implemented in 2002, and with the exception of 2003, have been conducted annually ever since. All findings in this report represent only those who were identified as self-employed consultants; defined as the 848 individuals who indicated that 50% or more of their consulting hours came from working independently, with partners, or incorporated. This report provides the profile of typical self-employed and independent technical consultants, including their education, experience, business practices, median earnings and hourly fee. The fee data this report provides will help you set an hourly rate that is competitive with your peers. **Member Price:** \$29.95 | **Non-member Price:** \$49.95



Social Media 101 for Consultants



BY PATRICK O'MALLEY

Social media expert

Patrick O'Malley has a message for consultants:

Everything you thought you knew about LinkedIn, Twitter, Facebook and YouTube is wrong. A frequent speaker on social networking, O'Malley recently brought this surprising bit of information to a meeting of IEEE Consultants Network members in Boston.

Read the rest of the article in the <u>16 July issue</u> of *The Institute*.



IEEE WCPs Share Why They Took the IEEE WCET Exam

With the approaching 2014 testing window for the IEEE Wireless Communication Technologies Certification (WCET) Certification exam, you may be asking yourself, "What are the reasons that I should earn this certification? How will it benefit me?" Who better to ask than current IEEE Wireless Communication Professionals (WCPs) themselves about what they feel are the greatest benefits of IEEE WCET Certification and what were the deciding factors that led them to earn their certification. Our findings show that there are three main drivers:

- 1. To show their commitment to the industry
- 2. To improve their skills and deepen their current knowledge base
- 3. To help them advance their career

Commitment to the Industry

As stated in the IEEE WCET Candidate's Handbook, this certification was created to "assess the skills and knowledge of practicing wireless communications professionals with the equivalent of a college or university degree and three or more years of professional experience." Earning your IEEE WCP credential shows that you have the knowledge and on-the-job experience needed to be successful globally in this industry. Many consider it to be a challenge to pass the test and taking the time to prepare on your own time demonstrates one's commitment to the profession and the wireless communications industry. "After 5 years working for a cellular network operator in several technical areas, my passion for the industry did nothing but increase. Such passion drove me to question myself about my professional development and commitment. I received the IEEE WCP information and I decided that to prepare and pass this certification would be the first step towards a bigger commitment to the profession I love," said Jorge Mario Guzman, IEEE WCP and Independent Contractor in Bogotá, Colombia.

Globally IEEE ComSoc's commitment to industry is

especially recognized through the partnerships that have been established to extend the reach of the IEEE WCET Certification Program. MCPC (Mobile Computing Promotion Consortium) of Japan and NTUST (National Taiwan University of Science and



Technology) of Taiwan are active partners in the IEEE WCET Certification Program supporting professionals in their regions to demonstrate their experience, knowledge and skills by earning this credential. Individuals from these partnerships join others who have earned the IEEE WCP credential from more than 24 countries around the world.

The wireless communications industry is experiencing tremendous growth, especially in the Asia-Pacific New opportunities are emerging requiring region. professionals to stay current and IEEE WCET Certification is a strong way to show your commitment to continuous professional development and advancement. IEEE WCET Certification makes it easier for industry to identify those dedicated to a profession in wireless communications. Adam Drobot, CTO, Telcorida, clearly expressed the value of this certification to industry during his 2010 IEEE Wireless Communications Networking Conference (WCNC) keynote address when he said that "the WCET exam provides professional recognition for those individuals who have the necessary breadth and can be counted on as effective practitioners in the engineering, deployment, or operation of wireless systems."

Personal Achievement and Professional Development

In addition to achieving an internationally recognized industry credential and joining an elite group of wireless communication professionals, earning this credential can be a very satisfying personal experience. You are not only demonstrating your commitment to the industry but also your commitment to your own professional development. It takes an investment in time to prepare for the exam. Most





individuals who pursue WCET Certification do a number of things to study, including reading reference materials, participating in training courses, and taking the practice exam. Through the preparation process and the challenge of successfully completing the certification exam, many individuals end up learning a lot about themselves. "Taking the exam is very useful to know my current skills and knowledge," stated Ryota Kimura, who recently earned IEEE WCP in Fall 2012. Again, Jorge Mario Guzman shared that for him "to earn the certification means to accomplish a goal after a big effort and commitment. The process of studying for the exam taught me a lot about myself and has given me motivation to move forward on my career." Hiroshi Kizaki of KDDI Corporation, in Japan, who also became an IEEE WCP in 2012 -- shared that for him earning the certification "was great challenge for me and I am very happy to get it."

Career Advancement

Another important benefit that was expressed by many of the IEEE WCPs was this certification would be very helpful in improving their career opportunities. This seemed to be especially true for those looking to move into new technical areas within the industry. Satoshi Nagano, IEEE WCP and certified engineer through Japan's MCPC, was looking to expand his experience into new areas and felt that the IEEE WCET Certification "is suitable for the future development of my career." Scott Peterman, IEEE WCP and RF Engineer for the United States Air Force, also shared a similar sentiment about WCET Certification, "I do feel that this can have a large impact on my career opportunities and I am glad that the IEEE created the certification to create a benchmark for people working in this field."

In addition to career advancement, many WCPs expect their certification to have a positive impact on their dealings with colleagues, customers, and future clients. Many independent contractors who earned this certification see it as a valuable asset for their consulting business and consider it to be a great way to convey their qualifications to new clients. When a client, co-worker, or organization sees that you've earned IEEE WCET Certification, they can be assured that you bring valuable knowledge and

experience to the job and can be relied upon as a leader in the field of wireless communications.

Get Certified

Your next opportunity to earn IEEE WCET Certification is quickly approaching with the testing window being open from 17 March - 12 April 2014. Applications to take the exam during that time period must be submitted by 28 February 2014, so you must act now. More information on how to apply for the exam can be found on the IEEE WCET website. Don't miss this opportunity to join an elite group of wireless communication professional who are already putting the benefits of their IEEE WCET Certification to good use in advancing their career, enhancing their professional development and showing their commitment to the industry.

Deadline Reminder: Commit to Taking the IEEE WCET Certification Exam

Applications for the Spring 2014 testing window for IEEE WCET certification are being accepted now through **28 February 2014**. Once you have completed the exam application, you can then decide the day that you would like to take the exam between the dates of **17 March - 12 April 2014**. Act now to become an IEEE Wireless Communications Professional (WCP) this year.

Curious if certification is right for you? <u>Learn more about it online</u> where you can also <u>review application</u> <u>details</u> and <u>understand exam specifications</u> to get a comprehensive view of exactly what is covered on the exam. You'll get a full appreciation of the breadth and depth of what <u>IEEE WCPs</u> know and why they stand head and shoulders above the competition.

Learn more about the certification exam application.



Health Care

Obama Administration Launches One-Stop-Shop Website to Educate Business Owners about the *Affordable Care Act*

The Obama administration launched <u>Business.USA.gov/healthcare</u>, a one-stop shop website that provides employers of all sizes educational materials on how the *Affordable Care Act* may affect businesses and help them compete. The site includes a tailored wizard tool, based on size and location, so businesses can learn how the law helps them provide affordable coverage options to their employees, while still meeting their bottom line. The site will act as a user-friendly hub that connects employers to informational content on tax credits and other provisions of the law--from the Small Business Administration, the Department of Health and Human Services (HHS) and the Treasury Department.

As part of the administration's ongoing dialogue with leaders of our nation's top businesses, this latest tool will help ensure that employers of all sizes know what the *Affordable Care Act* means for them, and that they have the information they need to take advantage of the new benefits and opportunities under the law.

The Obama administration will work with the employer community to ensure the site continues to be a helpful resource for businesses and their employees, including updating the site with additional, timely information.

"As the Affordable Care Act is implemented, it is so important for us to work with the business community, and provide employers with the information they need," said U.S. Commerce Secretary Penny Pritzker.

Many parts of the *Affordable Care Act*, signed into law in March 2010, are already in effect, including new consumer protections, and improvements to health-care coverage that ensure consumers get more value for their premium dollars.

Additional benefits will take effect in late 2013, and beyond.

Starting 1 October, individuals (including those who are self-employed), and small businesses looking for a better plan, will have a new way to shop for private health insurance through the Health Insurance Marketplace and the Small Business Health Options Program (SHOP) found at HealthCare.gov. Individuals may be eligible for lower costs on their monthly premiums; and self-employed individuals and small businesses may be eligible for tax credits to help with the costs of coverage.

President Obama issued a challenge to government agencies to think beyond their organizational boundaries in the best interest of serving America's business community, and start thinking and acting more like the businesses they serve. He directed the creation of BusinessUSA.gov, a centralized platform, to make it easier than ever for businesses to access services to help them hire and grow. BusinessUSA.gov leverages the resources of our partners across the federal government to ensure that business owners get comprehensive information and easy-to-use tools related to a range of topics, including health care. To learn more, visit <u>Business.USA.gov</u>.

This story is adapted from a 1 August 2013 SBA news release.



AICN Newsletter

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4TH QUARTER 2013



AICN & Chicago/Rockford Consultants Network Workshop

BY RICH FEDRIGON, IEEE CHICAGO SECTION

The AICN (Alliance of IEEE Consultants Network) and the IEEE Chicago/Rockford Consultants affinity group held a day-long consultants network workshop on 26 October. If you are interested in consulting, starting a business or just maximizing your career success, this group has a wealth of expertise, knowledge and available support regarding developing and promoting your engineering problem-solving talents.

At the workshop, 2014 IEEE-USA President, Dr. Gary Blank, highlighted the benefits of belonging to the AICN. In a very entertaining presentation, he gave some great reasons why IEEE membership is so important for networking and employment. For example, did you know that IEEE members live longer and drive better? That explains why IEEE members get

such great prices on life and auto insurance, as a result of belonging to our preferred risk pool. In a similar way, both the IEEE & AICN reputations provide additional credibility to potential employers regarding our job worthiness!

Blank's two specific recommendations were volunteering and using the AICN consultants' database. He contends that employers view the IEEE consultants' database as a premium resourceforfindingengineeringtalent. Several attendees backed up this assertion from their own experiences. Just as insurance underwriters have a favorable view of IEEE membership; many employers are confident that the AICN consultants' pool provides great engineering talent. Blank, with Bill Grist's assistance, provided a demonstration of how to use the

AICN database. The AICN database costs members only \$99 to join.

The workshop also covered an ambitious agenda of networking, consultant best practices, professional licensing, job hunting and start-up company information. Bob Krause came up with three fun exercises to start the workshop, breaking the ice and demonstrating some essential lessons. First, he highlighted the importance of being able to describe in 60 seconds exactly what we do in such a way that distinguishes our value to potential clients. I especially liked the scavenger hunt for finding personal attributes within workshop group. This activity nicely highlighted how our problem-solving methods change, as we adapt and learn to better collaborate.

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Another area of great interest was professional licensing. Ben Miller was the expert here, as he discussed the reasons for licensing, the environment, and the licensing process. If you're interested in this Miller, Chicago/Rockford topic, Consultant Network chair, is a great resource..

Larry Nelson, from the Worcester County, MA Section, gave an insightful and comprehensive overview on the "Life of a Consultant." He filled his presentation with best practices, including promotion, budgeting, bidding, ethics, and legal formations (e.g., the sole proprietorship vs. LLC issue).

Indiana's Will Kassebaum finished with his experience with start-up company tactics, based as co-founder of Algaeon. A group Q&A panel finished the event.

The workshop was beneficial both to the more seasoned consultants and the newer ones.

The topics addressed were invaluable

to anyone looking for a professional future with more independence, challenge, responsibility and financial rewards.

If you're interested in consulting as a profession please consider joining for free the **IEEE Consultants** Network when you renew your IEEE membership.

READING LIST 🚠



From IEEE-USA SmartBrief

IEEE-USA SmartBrief provides summaries and links to relevant and important news items of interest to U.S. IEEE members. Published every Thursday, IEEE-USA Smart Brief replaces IEEE-USA's Eye on Washington, which focused on political activities affecting engineers.

The Alliance of IEEE Consultants Networks Coordinating Committee (AICNCC) has asked the editors of Smart Brief to include news items that may be of interest to engineering consultants. The 17 October issue of SmartBrief highlights a recent Computerworld article on the growing number of IT specialists who are employed on a contract basis. AICNCC believes consultants will find the following brief informative:

Sign up today for IEEE-USA Smart Brief to finish reading this and other exciting stories.

Ranks of Contractors Swell Across IT Sector

A rise in demand for application developers combined with a reluctance among many firms to invest in workforce expansion has led to a rise in the number of IT specialists who are employed on a contract basis, according to new data from Computer Economics. Read the full article in the 10 October issue of Computerworld.





Larry Nelson's War Stories: Part II

BY LARRY G. NELSON, SR.



Fixed Price Contract vs. Hourly

Many consultants refuse fixed price contracts. I thrive on them. Consultants, for your clients that want fixed price contracts, do you know that change orders from original specs can net five times the original hourly quote? The key to success is a solid spec that all parties agree to. I have one client that continuously wants a fixed price contract, and then can't settle on a spec. The client locked-in and paid the retainer, but continued to change things monthly. I give them the cost to implement the change, and they pay. The last two projects cost them about five times what a straight hourly rate would have been, but they are very happy with my perceived flexibility.

With the economic climate as it is today, companies need tight budgets. Clients are afraid of anything open- ended. When you quote only an hourly rate, they see it as a neverending expense. The problem for the consultant comes when the specifications are not fully developed. Creeping features add costs and cause delays.

If you do not have clear specifications, the client will automatically assume you will flex to what they need for the original price. This assumption is especially true on a contract to deliver a "Widget" that "does XYZ," but they change the "how it will be done" daily. When you have a solid specification every time, and clients change something—you can simply let them know the impact on cost and delivery time, then let them decide if the change is worth it. If their spec is totally inadequate, you can often divide the project, and quote separately for the specification development.

One thing to be very careful of is not allowing your customer to pay less than the fixed price you quote. You are taking the risk, you deserve the rewards. You are not giving them the fixed price quote as an hourly rate, with a not-to-exceed price. If you have done the quote correctly, you will not lose money. If you come in under your budgeted time to the defined specifications, making the client

happy, and yourself more profit, then *congratulations*! On the other hand, if you take more hours than you budgeted, you are stuck with the fixed price. You have hopefully still made the client happy by an on-time delivery (there are 24 hours in a day available to work out problems), and you learn from your mistakes!

When a Client Demands a per person fee; consultant can make double or triple their hourly rate, after expenses

I had a client I offered to do some training for back when my rate was \$60.00 per hour. They purposed that I train small groups of employees, and they were going to print the handouts for distribution to their employees. I told them it would take a few days to create the handouts and the training program, and depending on how many people were to be instructed, it would take two to four hours per group for training. The client then asked for a per person fee, which included all the handouts. I provided another quote (high — to discourage them), yet they went with it. I had to cover myself with a high quote, assuming the client would throw small groups at me, as they implied. When the dust settled, all the employees came in on a Saturday morning. We did a single, 2.5-hour seminar. The client never asked for a revised quote to the new terms (one single session), and gladly paid me the per person rate.

If you are lucky enough to land contracts like these, be grateful and save the money for when things do not go as well. Consulting can be very cyclical, so you need to budget — and keep an even keel.

Larry G. Nelson, Sr. can be contacted at <u>L.Nelson@ieee.org</u>; or at Nelson Research at <u>http://www.mchipguru.com/</u>.

Cover Your Assets

Claims Made and Reported—What You Need To Know...

BY MARSH U.S. CONSUMER

Pick your favorite adage about past events: water under the bridge... don't cry over spilled milk... what's done is done. Now forget them. When it comes to claims against you or your firm, you may very well be found liable for an act that occurred in the past! Liability is why claims-made coverage is so important. Let's explore why:

Under a claims-made policy, the event that triggers the insurer's duty is reporting a claim within the policy period that arises from an act, error, or omission — committed on, or after, a retroactive (or prior acts) date — or within the same policy period. Claims made against this policy form mean that the limits and deductibles in force at the time the claim is made are what govern coverage. The error could have occurred in the past, but the claim is just now being asserted. Carriers offer this type of coverage in today's market.

To understand fully, look at the diagram below. Suppose your practice began in January 1987, and you didn't purchase professional liability coverage until June 1987. At that time, you purchased your limits of \$1,000,000 per claim/\$1,000,000 per annual aggregate with a \$5,000 deductible. As your practice evolved, so did your professional liability coverage. In August 2013, you increased your limits of liability to \$2,000,000 per claim/\$2,000,000 per annual aggregate — with a \$0 deductible.

Wisely, you have maintained coverage, since the initial purchase in June 1987. Unfortunately, in August 2013, your insurance company notified you regarding a potential claim, from an incident that occurred in January 2000. As noted earlier, the limits and deductible in force at the time the claim is made are what is available, and what will govern coverage for the incident/claim. It is important to



note that the *trigger* date is the date a claim is made, not when it is reported to the carrier. Be sure to read and follow the claim reporting requirements outlined in the terms and conditions of your policy, to ensure your coverage is not jeopardized. Late reporting could negatively impact the coverage available.

As an example, let's take this example in another direction. Suppose in August 2013, your practice was winding down. Instead of increasing your limits, you decreased them to \$500,000 per claim/\$500,000 per annual aggregate. In this case, the limits of \$500,000 per claim/\$500,000 annual aggregate would govern the policy, even though limits of \$1,000,000 per claim/\$1,000,000 annual aggregate were in effect at the time the error or omission took place. Changing limits, deductible, or present day coverage will have an impact on your coverage — all the way back to the retroactive date — in this instance, June 1987. As you can see by these two examples, considerable time can pass between when your services are rendered, and when the claim is filed.

"Claims made" policies have two prerequisite conditions for coverage:

- First, the policy has to afford coverage for the time period during which the services giving rise to the claim were rendered, (after the Retroactive Date).
- Second, coverage has to be in force when the actual claim is first made.





Coverage won't necessarily begin when your practice starts. It will be afforded for acts that occurred after the Retroactive Date. Prior Acts coverage should date back to the first date of continuous claims-made coverage, to avoid any gaps in coverage. If you are switching carriers, it is important to carry your Retroactive Date to your replacement policy, or purchase an Extended Reporting Period, more commonly referred to as a "Tail."

So, what happens when an insured decides to retire, or even discontinue practice?

Be sure Extended Reporting Period Options are available to cover claims after you retire, or upon death. Or in the event you cancel, or fail to renew the coverage. A provision should be made making an Extended Reporting Period available, if the insurance company or insured cancels, non-renews, or reduces limits and/or coverage under the policy.

When purchasing professional liability coverage, it is vital to purchase your coverage from a top- rated insurance carrier, and revisit your professional liability policy periodically. As your needs and/or practice changes, make sure your current policy still meets your needs.

If you have any questions regarding Claims-Made coverage, please call your IEEE-sponsored professional liability insurance specialists toll-free at 1-800-375-0775.

Or, if you would like more information on the IEEE-sponsored Professional Liability Insurance Plan, visit IEEEinsurance.com.*

*The IEEE Member Group Insurance Program is administered by Marsh U.S. Consumer, a service of Seabury & Smith, Inc. The IEEE-sponsored Professional Liability Insurance Plan is underwritten by Certain Underwriters at Lloyd's of London, and is available to U.S. residents.

...from the institute



Take Networking to the Next Level

Networking with colleagues not only increases your chances of connecting with potential employers and getting hired, it can also help you advance in your current job. Claire Tse, a certified instructor in leadership and intercultural communication, talks about the ins and outs of effective networking. Read what she has to say in the 21 October issue of *The Institute*.

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