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#116

■ EL SALVADOR, UN DESTINO
DIFERENTE EN R9

#KNOWHOW: VIRTUAL
SPEAKERS BUREAU ■

■ IEEE WIE 2020 AWARD,
REGION 9 WINNERS

NOMINATIONS: CANDIDATES TO
REGION 9 DIRECTOR ■



IEEE

Instalación y montaje de la primera turbina del parque eólico Ventus 50 MW en Metapán, El Salvador

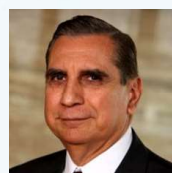


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MIEMBROS COMITÉS AD HOC

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#IEEEKNOWHOW

Virtual Speakers Bureau

INICIATIVA DEL COMITÉ DE ACTIVIDADES ESTUDIANTILES DE IEEE



El Comité de Actividades Estudiantiles de IEEE creó una iniciativa llamada Virtual Speakers Bureau. Allí buscan conectar entre oradores y ramas estudiantiles, en el marco de la virtualidad que estamos viviendo: utilizando herramientas y recursos en línea para explorar al máximo las experiencias vividas por los voluntarios.

Paso 1:

Dirígete a este [enlace](#), en donde encontrarás la página principal del IEEE Student y la sección correspondiente a esta iniciativa.



Paso 2

Explora el [listado](#) de oradores que han decidido ser parte de esta iniciativa, puedes utilizar la barra de búsqueda ubicada en la esquina superior (a) o revisar los nombres de +190 oradores (b). Allí puedes encontrar las características de la charla, como su nombre y si es considerada Técnica o Profesional.

Search Virtual Speakers

Form to Request a Virtual Speaker

Show 25 entries

Search: (a)

Time Zone	Speaker Name	Job Title/Employer	Technical or Professional	Topic Title	Topic Description	Language
GMT-6	Elisa Barney	Professor, Boise State University; IEEE SAC Chair	Technical	Digital Humanities - How to use EE & CS Skills to solve mysteries in the Humanities	Image Processing & Machine Learning	English
GMT-6	Elisa Barney	Professor, Boise State University; IEEE SAC Chair	Professional	About IEEE Student Programs	IEEE	English
GMT+3	Simay Akar	Renewable Energy Marketing and Business Development Professional	Professional	Going Out of Your Comfort Zone	Soft Skills	English, Mandarin Chinese, Turkish

(b)

Nota 1: ¡Recuerda revisar la zona horaria y el idioma en que el orador se ha ofrecido a realizar esta actividad!

Nota 2: La barra de búsqueda sirve para cualquier palabra en la tabla, por ejemplo: nombres, temas o idiomas

Paso 3

Una vez has escogido al orador, es necesario diligenciar el formulario que se encuentra en el encabezado de ese sitio web denominado “Form to Request a Virtual Speaker” o simplemente dando [clic aquí](#).

Form to Request a Virtual Speaker

* Required

Email address *

Your email

Student Branch Name *

Your answer

Paso 4

El equipo de la iniciativa Virtual Speakers Bureau se encargará de hacer el primer contacto entre ustedes y el orador que han escogido.



Paso 5

Ahora estas listo para conversar con tu orador: organicen los detalles en conjunto, como el día, la hora y la plataforma (Webex, Zoom, etc) con la que se sientan más cómodos y Listo ¡**comienza a promocionar tu evento!**



Si deseas participar de esta iniciativa como orador, también puedes hacerlo [registrándote aquí](#)

Gina Paola Carrillo
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El Salvador, Un destino diferente en R9

Rosa Mejía

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INFORMACIÓN PARA EL AUTOR

El Salvador, oficialmente República de El Salvador, es un país soberano de América Central ubicado en el litoral del océano Pacífico con una extensión territorial de 21 041 km [1]. En el año 2019 contaba con una población estimada en 6 704 121 habitantes, siendo el país más densamente poblado del continente americano, sin incluir algunas islas en el mar Caribe. Su clima es cálido tropical pero debido al contraste geográfico el clima puede variar. La ciudad de San Salvador es la capital del país; Las ciudades de San Miguel y Santa Ana son otros centros importantes del país. El Salvador posee una extensa diversidad cultural y en él hay cientos de lugares maravillosos únicos en Latinoamérica.



Ilustración 1. Pupusa, platillo tradicional de El Salvador.

El platillo típico del Salvador es la Pupusa, el cual muchos al visitar el país no tienen la idea que existen decenas de versiones de la pupusa, que dependiendo de la zona en la cual se visite el país los aderezos que la acompañan pueden variar, pero lo más esencial que hay en El Salvador es que las pupusas se deben comer sin cubiertos, solo con las manos. En El Salvador hay un sinfín de tradiciones las cuales trascienden por generaciones, algunas de ellas son:

DÍA DE LOS FAROLITOS.

El 7 de septiembre los habitantes de Concepción de Ataco celebran una fiesta en donde se colocan miles de farolitos en la iglesia, puertas y ventanas de sus casas; todo esto para celebrar el nacimiento de la Virgen Niña, una tradición que ha perdurado por casi más de 100 años.



Ilustración 2. Ejemplo ilustrativo del día de los farolitos.

ALFOMBRAS DE SEMANA SANTA.

Durante el viernes santo de la semana santa, las calles de los pueblos y ciudades de El Salvador se adornan con coloridas alfombras las cuales su elaboración significa para los creyentes agradecer una gracia, un milagro, y se convierte en obligación personal del individuo.

Un elemento indispensable de la semana santa lo constituye indudablemente son las alfombras elaboradas para el paso de las procesiones católicas por las calles de la ciudad.

Las alfombras elaboradas de aserrín, flores, vegetales o frutas constituyen una de las características más importantes de las celebraciones de la Semana Santa en Latinoamérica. Las alfombras son un arte efímero reconocido en todo el mundo que demuestra la devoción y fé del pueblo católico que dedica este trabajo y esfuerzo para recibir la bendición de la imagen que llega a recorrer su barrio.



Ilustración 3. Alfombras elaboradas en las celebraciones de la Semana Santa.

EL SALVADOR: PUNTO DE REFERENCIA DE ENERGÍA FOTOVOLTAICA EN CENTROAMÉRICA CON LA PLANTA SOLAR NEOEN QUE INSTALÓ LA BATERÍA DE LITIO MÁS GRANDE DE LA REGIÓN

La planta fotovoltaica de Neoen, Capella Solar, pone en operación una batería de iones de litio con capacidad de 3.3 MW/2.2 MWh (Albireo Power Reserve), dedicada a brindar servicios de regulación de frecuencia, lo cual fortalece la estabilidad y seguridad de la red eléctrica.

Neoen finalizó la instalación de la infraestructura de almacenamiento de energía más grande de

Centroamérica, llamada Albireo Power Reserve, la cual funciona dentro de su segundo proyecto fotovoltaico en el país, Capella Solar, ubicado en el departamento de Usulután. Esta novedosa inversión consiste en una batería de iones de litio con capacidad de 3.3 MW/2.2 MWh.

Luego de integrar los componentes de la nueva infraestructura, se procedió a la implementación de un específico protocolo de pruebas, diseñado en colaboración con la Unidad de Transacciones (UT). Durante dicho proceso y su subsecuente operación, la batería ha mostrado una reacción eficaz para regular la frecuencia de la red: ha respondido en tiempos de solo 100 milisegundos, un desempeño que supera con creces a la reactividad de máquinas síncronas operando en el país, lo cual se traduce en una mejora de calidad del servicio que provee estabilidad y seguridad en la red.

El almacenamiento con baterías es el complemento perfecto al crecimiento de la energía renovable que se planifica para El Salvador, siendo esta tecnología la adecuada para aportar la flexibilidad que el sistema necesita con miras a administrar la naturaleza volátil de los recursos renovables. Con una reducción del costo en los últimos años, ahora el almacenamiento puede ser instalado a gran escala y, de ser utilizado para la totalidad de la reserva que requiere el país, se podrían ahorrar US\$10.3 millones en combustible fósil al año, según el informe publicado por la UT en diciembre de 2019.

Capella Solar es un proyecto que contractualmente está inyectando a partir de abril 2020 cerca del 4% de la energía del mercado mayorista en el país, contando con dos plantas, llamadas Albireo I y Albireo II; juntas suman 412.000 módulos fotovoltaicos y una capacidad de 140 MW. Su enegeración ascenderá al equivalente de energía que cada año consumen 255.000 hogares promedio.

Instalación y montaje de la primera turbina del parque eólico Ventus 50 MW en Metapán, El Salvador:

REFERENCIAS

- [1] MINISTERIO DE CULTURA DE EL SALVADOR www.cultura.gob.sv/
- [2] Texto y Fotos Por www.estrategiaynegocios.net



RNR & RNYP 2020: recorde de submissões nos concursos do IEEE Brasil

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Nos dias 18 e 19 de junho de 2020 foi realizada a XVII Reunião Nacional de Ramos e VIII Reunião Nacional de Young Professionals do IEEE Brasil, RNR & RNYP Brasil 2020. Pela primeira vez em formato virtual, devido à pandemia do COVID-19, o evento abordou diversos assuntos presentes no dia a dia dos voluntários da maior organização técnica do mundo como: financiamento de projetos, liderança, gestão de equipes e documentação. [1] Teve a presença ilustre de diversos voluntários de destaque no Brasil falando sobre suas experiências dentro do IEEE.

A programação do evento foi organizada pelos coordenadores André Kakiuthi - atual presidente do Young Professionals da Seção Sul Brasil e coordenador da RNR & RNYP 2019 -, e João Lucas - atual SR da Seção Minas Gerais e também coordenador da RNR & RNYP 2021. Os concursos ficaram sob a responsabilidade do Comitê de Atividades Estudantis do Conselho Brasil do IEEE (IEEE Brazil Council SAC), através da Diretora de Concursos do SAC, Flávia Dias, da CSR, Letícia Martins, e do CSAC, Waldir Filho. A identidade visual e a divulgação do evento foi realizada pela voluntária Laura Rezende. O site foi produzido pelo webmaster do SAC Brasil, Carlos Alexandre.

Foram 140 submissões nas 14 categorias dos concursos, listados todos os vencedores na próxima página, sendo um recorde de participação dos Ramos Estudantis do IEEE de todo o Brasil. Para a Letícia Martins, o evento para o Conselho Brasil "foi um marco importante na motivação e envolvimento de inúmeros voluntários na participação dos concursos, o que ocasionou um número expressivo de submissões, no engajamento de ramos em prol dos princípios IEEE que com toda certeza contribuirão futuramente para o aumento e a manutenção de membros e ramos estudantis". Outro legado do evento, para os organizadores, foi a qualidade do evento no formato virtual, promovendo os benefícios e oportunidades do IEEE

REFERÊNCIAS

- [3] [IEEE BRAZIL COUNCIL SAC. IEEE RNR & RNYP Brasil 2020. Accessed: Aug. 28, 2020. AVAILABLE:https://attend.ieee.org/rnrnyp-2020/.](https://attend.ieee.org/rnrnyp-2020/)



Imagem 1. Foto vencedora do Concurso de Fotos, do Ramo Estudantil IEEE UFJF.

Tabela 1. Ganhadores dos concursos de Ramo Estudantil Exemplar.

Categoria	Ramo Estudantil IEEE		
	Ramo UFJF	Estudantil	IEEE
	Ramo UFMS	Estudantil	IEEE

Tabela 2. Ganhadores dos concursos de Voluntário(a) Exemplar.

Categoria	Nome
	Ana Hellen Carvalho dos Santos
	Alison Candido da Silva
	Amanda Pereira Monteiro

Tabela 3. Ganhadores dos concursos de Capítulo Técnico Estudantil Exemplar e de Grupo de Afinidade Exemplar.

Categoria	Posição	Unidade Organizacional
Capítulo Técnico Estudantil Exemplar		IEEE PELS/IAS UFCG
		IEEE PES UFF
		IEEE AP-S UFCG
Grupo de Afinidade Exemplar		IEEE SIGHT UFJF
		IEEE WIE UFJF
		IEEE WIE UFCG

Tabela 4. Ganhadores dos concursos de Caso de Sucesso.

Categoria	Posição	Nome do Caso de Sucesso	Ramo Estudantil IEEE
Atividades Técnicas		Da Sala de Aula à Indústria	Ramo Estudantil IEEE UFJF
		Foguetemodelismo	Ramo Estudantil IEEE UFF
		EEEcruz	Ramo Estudantil IEEE UFRB
Cooperação Inter-ramos		IEEE Day 2019	Ramo Estudantil IEEE UFCG
		Otto Day	Ramo Estudantil IEEE UEM
		Capacitação de Impressão 3D	Ramo Estudantil IEEE UERJ
Desenvolvimento de Membros		Caravana RNR	Ramo Estudantil IEEE UFJF
		TrainIEEE	Ramo Estudantil IEEE UFCG
		Participação do Torneio Juvenil de Robótica	Ramo Estudantil IEEE UFCG
Gestão e Parcerias		Hackathon	Ramo Estudantil IEEE UFCG
		RED no Setor Elétrico Brasileiro	Ramo Estudantil IEEE UFJF
		II Semana das Mulheres	Ramo Estudantil IEEE UFJF
Projeto Educacional		IEEEEscolas	Ramo Estudantil IEEE UFJF
		KidSTEM	Ramo Estudantil IEEE UFF
		Conversando com as Mãos	Ramo Estudantil IEEE UFJF
Projeto WIE		Mutirão Tecnológico	Ramo Estudantil IEEE UFJF
		Girls to Girls	Ramo Estudantil IEEE UERJ
		WIEEEK	Ramo Estudantil IEEE UFJF
Sustentabilidade e Responsabilidade Social		Competição IEEE HAC HEC	Ramo Estudantil IEEE Unesp - Guarantiguetá
		Ottobots	Ramo Estudantil IEEE UEL
		Promovendo os Objetivos de Desenvolvimento Sustentável da ONU através do IEEE	Ramo Estudantil IEEE UFPB

Entendiendo las necesidades de los miembros de la Región 9

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Como parte de la respuesta de la Región 9 a la pandemia global, se identificó que es importante entender las necesidades y preferencias de nuestros miembros demográficamente. Para ello, los comités de Relaciones con la Industria, Mujeres en Ingeniería y Jóvenes Profesionales unieron esfuerzos, y generaron una encuesta que permitió consolidar información de calidad para nuevas iniciativas en R9: **Herramientas para el Desarrollo profesional, el cual dará inicio el 8 de Octubre.**

La encuesta tuvo la participación de más de 1400 miembros, de 26 diferentes países, quienes compartieron sus preferencias sobre los productos que usan actualmente para su desarrollo profesional y que son ofrecidas por IEEE, qué estarían interesados que se ofreciera, cuáles son las áreas técnicas de mayor interés, e incluso el tiempo y recursos que invertirían en este tipo de iniciativas.

La herramienta más frecuente, siendo uno de los productos tradicionales del instituto, el

IEEE Xplore es el de mayor acogida y reconocimiento. En segundo lugar y con poco más de un año de estar disponible, el ILN (IEEE Learning Network) fue resaltado como un importante recurso, seguido del IEEE TV y del CLE (Center of Leadership Excellence). También es importante observar que el 17% de los encuestados, no conoce de estas herramientas, lo cual es un punto que se debe abordar, buscando la forma de llevar nuestros beneficios a la totalidad de la membresía.

Los cursos y capacitaciones técnicas siguen siendo el producto de mayor interés, en los cuales los temas de mayor relevancia de acuerdo a las encuestas son: Internet de las cosas, **Industria 4.0, Redes Inteligentes y Big Data** entre otros, información sobre la cual se estará desarrollando, la siguiente iniciativa de la Región, una plataforma de educación virtual con contenido en los tres principales idiomas de preferencia en la Región: Español, Portugués e Inglés.

Por otro lado, los productos enfocados en liderazgo y habilidades blandas, han tomado una gran importancia para nuestra membresía; siendo estos temas sobre los cuales hay poco contenido en los recursos que más frecuentan nuestros miembros, esto constituye la base de la iniciativa que estos tres comités van a estar desarrollando y ofreciendo durante el último cuarto del año.

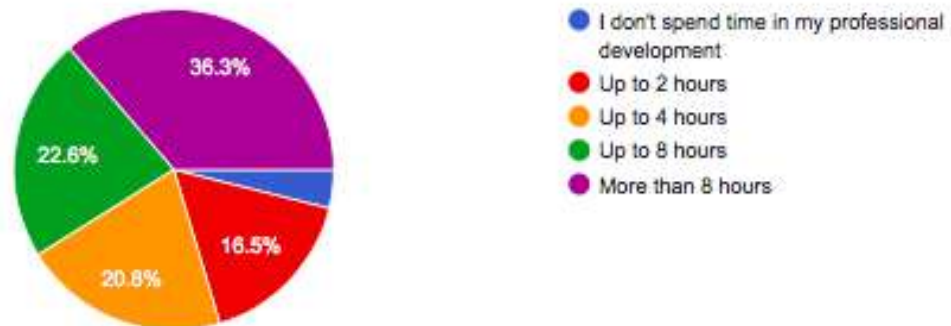
La Región 9 está comprometida en generar beneficios en un momento histórico en el cual los cambios han sido la norma y en donde la posibilidad de adaptación a los mismos es

determinante para el futuro profesional. Por ello, y considerando que nuestros miembros quieren dedicar tiempo a su desarrollo profesional, estamos comprometidos en desarrollar nuevos beneficios que lo permitan y faciliten.

Un especial agradecimiento a Ana Salazar y Ronny Cabrera quienes fueron claves para generar esta encuesta, y a los comités de Jóvenes Profesionales, Relaciones con Industria, Mujeres en Ingeniería y Actividades Educativas por la generación de los programas.

How much time do you spend on your professional development per month on average?

1,401 responses



IEEE Region 9 Industry Engagement and Entrepreneurship Committee activities

Roxana Alfaro

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INTRODUCTION



Figure 1. IEEE R9 IEE Committee members.

The IEEE Region 9 Industry Engagement and Entrepreneurship Committee (IEEC) aims to be the supporting group for the R9 Sections to facilitate them industry engagement activities across IEEE, identifies and acts on opportunities within our Institute. We are also reaching IEEE entrepreneurs to encourage and provide tools or resources to successfully develop their projects and to create a strong community within IEEE.

MEET THE COMMITTEE CHAIR, CHRISTIAN ORELLANA



Figure 2. Christian Orellana, IEEC Chair.

Hello IEEE members, as the coordinator of the Industry Engagement and Entrepreneurship Committee, which is conformed with a great team from all the IEEE R9 Geographic Councils, we are committed to inform all our Region 9 members the work that IEEE is making to work hand-by-hand with the industry in the new age of Industry 4.0.

As volunteers, with the spirit that characterizes us, we hope to provide you documentation of good practices that we consider necessary for each

Section to have good relations with the local industry. The industry sector is evolving day by day, so as organization we have to move also to present results that we can use as members.

We are also working in disseminate the tools that IEEE provides to all the entrepreneurs so you can success in your innovation ideas for the benefit of humanity as we promote.

We are confident that you will hear from us soon and we hope you will join the evolution we are experiencing. Our knowledge is our power!

NEWSLETTER LAUNCH

Available for IEEE R9 members, we recently launched our Newsletter to inform our members about activities being held by the Sections in collaborations with the industry, government institutions or other organizations, as well as entrepreneurs in the region.

Don't forget to read our newsletter to receive the top trend news about IEEE products and services available to the industry and entrepreneurs, and to find great resources that will help you manage your activities with these important groups.

SURVEY TO IEEE MEMBERS AND SECTIONS

As part of our activities, we have launched two surveys in recent months: one survey for members

and another one for Sections. The responses give us good input to focus our efforts in what our membership wants and what our Sections need. The following is a summary of the results.

IEEE MEMBERS SURVEY

The top 3 specialization field of the respondents were Power, Telecommunications and Unspecified (Various fields). Most of these members are interested in technical training and the developing Management and Entrepreneurial skills. And 3 of the most used member benefits for them are Networking opportunities, opportunity to get involved locally and Access to online IEEE members directory to connect.

IEEE SECTIONS SURVEY

We found less than 30% of the R9 Sections have an Industry Relations Representative on their board, and nearly 36% of them have Memorandum of Understanding (MOU) signed with institutions, mostly Government. This MOU are opportunities for them to offer trainings, develop membership and provide institutional collaboration between IEEE and the local government. The Sections provided us successful cases about their projects and initiatives in this topic and how we could support them with that.



Figure 3. IEEC Newsletter.

Actividades técnicas y eventos en línea del capítulo PES (CH9023) Sección Puerto Rico y Caribe

*Ing. Luis A. Tatis Morales, BSEE, M.E.M., Section Treasurer and PES Chapter Chair. IEEE
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EVENTOS REALIZADOS EN CONJUNTO CON CAPÍTULOS DE PANAMÁ CHILE Y LECTORES DISTINGUIDOS INVITADOS

El miércoles 8 de abril se ofreció la Conferencia sobre Resiliencia, experiencias desde Puerto Rico presentada por el Ing. Luis A. Tatis BSEE, MEM. Fue muy buena y dinámica en su totalidad. Tuvo 17 participantes.



Imagen 1. Conferencia en el PES DAY 2020 por parte del Presidente del Capítulo (Embajador PES DAY).



FECHA: MARTES, 11 DE AGOSTO DE 2020
HORA: 18:00 (GMT - 05) | 19:00 (GMT - 04)

EVENTO GRATUITO

ORGANIZAN:

Imagen 2. Seminario online Resiliencia de Sistemas Eléctricos en América Latina



VIDEOCONFERENCIA
• EVENTO ESPECIAL •

PANAMÁ

IEEE PES DAY 2020
More Power to the Future

Resiliencia de la Red Eléctrica, experiencias desde Puerto Rico

La gran mayoría de las fallas severas en la red eléctrica son causadas por desastres naturales. Conversaremos con profesionales sobre estas vivencias y las repercusiones técnicas, sociales, políticas y económicas.

- EVENTO GRATUITO
- Exclusivo para Miembros IEEE
- Fecha: Miércoles 8 de abril 2020
- Hora: 8:00 PM (GMT-5)
- Reserva en: bit.ly/PESday2020Pan08
- Moderado por: Tania Abrego tania.abrego.pa@ieee.org
- Expositor: Luis A. Totis Morales, BSEE, M.E.M., IEEE SM lutstalis@ieee.org

Contacto: pes-panama@ieee.org WhatsApp: +507 6219 1106

www.ieee.org r9.ieee.org/panama/ Sección PES UTU Capítulo PES Panamá Sección de Panamá

IEEE

Imagen 3. Conferencia sobre Resiliencia, experiencias desde Puerto Rico.

PES Month
IEEE Puerto Rico and Caribbean Section

Power Quality - Calidad de Potencia y Generación Distribuida

Dr. Ing. Juan Carlos Gomez Targaron, PES Distinguished Lecturer

OBJETIVO A:
Ingenieros y técnicos encargados de realizar el registro y análisis de los parámetros de calidad del suministro de potencia, en redes o sistemas eléctricos.

OBJETIVO B:
Identificar y presentar las mejores alternativas de solución para monitorear el suministro eléctrico dentro de los límites de calidad permitidos por la normativa vigente y plantearlos contra las perturbaciones eléctricas.

Sobre el presentador: Ingeniero Electromecánico graduado de la Universidad Nacional de Cuyo, Argentina, en 1974. Estudió su doctorado en la Escuela de Ingeniería, Informática y Tecnología de la Universidad Sheffield Hallam de Inglaterra, obteniendo su título de Doctor en Filosofía de la Ciencia (Ph.D.) en 1994. Actualmente trabaja como Profesor Visitante en el Departamento de Arquitectura de Computadores y Tecnología Electrónica de la Universidad de Cádiz, España, colaborando en el diseño del Curso de Posgrado "Calidad y Fiabilidad de la Energía Eléctrica".

Ha realizado diferentes publicaciones de libros, revistas y charlas. Es miembro del IEEE. Ha recibido el premio IEEE "Distinguished Large Chapter Award" en 2001. Es Conferencista distinguido del PES. Fue ganador del "Recognition Award" del U.S. National Committee of CIGRE por el trabajo "Isolation of generator equipment anomaly in the study of powerplant protection for transmission and subtransmission systems", presentado en Agosto de 2005 en París, Francia.

Día: jueves 27 de agosto de 2020
Hora: 6:00p.m. - 8:00p.m. (Hora del Este)
Registro: <http://bit.ly/CH9023PES>
Plataforma: Google Meet
Idioma: español
Sección - PES Chapter (CH9023)

IEEE

Imagen 4. Celebrando el mes de PES en la Sección IEEE Puerto Rico y Caribe con la presentación titulada Calidad de potencia y Generación Distribuida por el Dr. Ing. Juan Carlos Gomez Targaron,

Presentación organizada y coordinada por rama estudiantil IEEE de Chile. Estuvo muy interesante y dinámico alcanzó un máximo de 88 participantes. En representación como Presidente del capítulo PES "Power and Energy Society" de Sección IEEE Puerto Rico y Caribe".

PES Month
IEEE Puerto Rico and Caribbean Section

Deregulation of electricity markets: state of the art and main challenges

Dr. Luiz Augusto Nobrega Barroso PES Distinguished Lecturer

Abstract: This presentation will discuss the state of the art of the deregulation of electricity markets and the main challenging's looking forward in face of the penetration of renewables, including the need to adapt current market designs as well as to develop new power planning techniques to cope with renewable integration, be in interconnected or islands power systems.

About the presenter: Luiz Barroso is the CEO of PSE Energy Consulting and Analytics. He was the head of the Brazilian Energy Planning Agency and a visitor in the International Energy Agency. He has over 20 years of experience in power-gas systems planning, economics, operation, risk management, and market design in about 30 countries in the Americas, Europe and Asia. He is also a research affiliate of Comillas Pontifical University's Institute for Research in Technology (ITI), a lecturer in the Florence School of Regulation. He is an IEEE Fellow, for his analytical contributions on power system economics and regulation and was the recipient of the 2016 IEEE PES Outstanding Young Engineer Award.

Date and hour: 13th august 2020, 6:00p.m. – 8:00p.m. EST
Registration: <https://bit.ly/3330E8d>
Platform: Google Meet

Organizes:

- IEEE PRC Technical Activities
- IEEE PES PRC Section Chapter

Puerto Rico and Caribbean Section - PES Chapter (CH9023)

IEEE

Imagen 5. Presentación por lector distinguido y IEEE Fellow

Tema: Deregulation of electricity markets: state of the art and main challenges

Presentado por el Dr. Luiz Augusto Barroso,

País: Brasil

In collaboration: IEEE Puerto Rico and Caribbean Section Technical Activities (TAC) Celebrating our IEEE Power and Energy (PES) chapter month Activities.

The Distinguished lecturer presentation was a success and with 47 participants it was a pleasure working with.



IEEE Women in Engineering R9 Webinar Series

IEEE WIE R9 Committee
wie.r9@ieee.org

INTRODUCTION

This year, IEEE WIE R9 Committee launched its Mentoring Program developed to support the regional Section Affinity Groups in the following areas:

1. WIE Activities and Events
2. Increase in membership
3. Nominations for Senior members
4. Use of IEEE tools

That's why we organize monthly webinars in order to meet these goals in two different series of virtual sessions:

Inspiring Women of Latin America

Webinar dedicated to inspiring women from our Region 9 to talk about their professional, academic and personal path in the STEM field.

Organizational Units management

Facilitating resources and guidelines that all IEEE organizational units should know and follow.

The following are the webinars organized between July and August related to these topics.

INSPIRING WOMEN SERIES, VOL. 2: ILYA ESPINO DE MAROTTA, PANAMÁ

On July 30th, Engineer Ilya Espino, from Panamá, gave a presentation about her experience as

Manager of the Panama Canal Expansion Project: professional growth, technical challenges and tips that helped her in her career.

She also shared with us how she managed to balance her work with her personal life during family adversities and project demands in this months of the project.

The meeting recording is available on IEEE WIE R9 YouTube Channel [1].

Ilya R. Espino de Marotta is an engineer best known for leading the Panama Canal Expansion Project as Executive Vice President for Engineering in the Panama Canal Authority. She was appointed to the role in 2012 and was the first woman in the history of the Panama Canal Authority to hold the role.

LEVERAGING IEEE SOCIAL MEDIA

On August 15th, in coordination with the IEEE Strategic Marketing Services team, developed a presentation focused on How to successfully leverage social media content through IEEE websites, profiles or channels.

This webinar covered topics like content, best practices and resources available to IEEE members to help you target your audience and create more value for them.

The speaker of this webinar was Gerardo Barbosa, current IEEE R9 Treasurer and VoLT volunteer. The meeting recording will be available

for members on IEEE.tv [2]. Querys on this topic, email to socialmediahelp@ieee.org.

REFERENCES

- [1] <https://youtu.be/5Dlk96FsfyU>
- [2] <http://ieeetv.ieee.org/>



Figure 1. Ilya Espino de Marotta.



Figure 2. Social Media at IEEE presentation.



IEEE

IEEE Women in Engineering
WIE

WINNERS AND HONORABLE MENTIONS FROM REGION 9

IEEE WIE 2020 Award, Region 9 Winners

IEEE WIE R9 Committee
wie.r9@ieee.org

INTRODUCTION

Each year, IEEE Women in Engineering Affinity Group awards those inspiring members and affinity groups around the world for their performance, successful projects and contributions to WIE goals in the following categories [1]:

1. IEEE Women in Engineering Inspiring Member of the Year Award
2. IEEE Women in Engineering Inspiring Student Member of the Year Award
3. IEEE Women in Engineering Affinity Group of the Year Award
4. IEEE Women in Engineering Student Branch Affinity Group of the Year Award

This year, 1 of the winners of this international recognition was awarded to an affinity group from our Region 9, and we also won 5 out of 8 honorable mentions of the awards. In this article, we present the winner of Region 9, their stories and inspirational words to all the volunteers.

We congratulate each of the winners for their awards and their effort in putting your groups on the map, while contributing to the IEEE WIE goals.

More information about the IEEE WIE Awards: <https://wie.ieee.org/ieee-wie-awards-program/>

IEEE WIE UNIVERSIDADE FEDERAL DE CAMPINA GRANDE (UFCG) SBAG, STUDENT BRANCH AFFINITY GROUP OF THE YEAR AWARD



The IEEE WIE UFCG was founded in September 2015, with the goal of creating a support network for female students of the exact courses of the Federal University of Campina Grande (UFCG), Paraíba, Brazil.

Over these years, the group has consolidated itself at the university as an extremely necessary

support network for students of engineering courses and directly contributes to the construction of a university environment more aware of important social issues that need to be discussed, mainly gender issues.

Currently, the IEEE WIE UFCG carries out several activities and actions throughout the year that can be highlighted as follows:

- **Monthly meetings:** open meetings for the general public, including members and volunteers. Topics related to female representativeness and upcoming events are discussed in these meetings.

- **Fearless Women:** the purpose of this activity is to bring out the female representation, by highlighting the story and contributions of one inspiring woman each month.

- **“Elas por Elas”:** it is an annual event promoted in honor of International Women’s Day. The goal is to carry out activities and lectures that seek to promote and strengthen the performance of women in the field of the exact sciences.

- **Flash Talk:** it’s a time to discuss in a more relaxed way, such as an exchange of ideas, themes according to the group’s approach. Professionals from the chosen area are usually invited to chat with the group.

- **Outubro Rosa Campaign:** In October, a month dedicated to breast cancer awareness, various activities, in Brazil, are executed such as talks, days to dress in pink or haircuts to donate to women with breast cancer.

- **Shorts Day:** For one day, volunteers wear shorts or any piece of clothing that they normally refrain from wearing to avoid possible situations of harassment; meet to discuss the topic.

- **Book Club:** In the second half of 2019 IEEE WIE UFCG created the WIE Book Club. Monthly meetings are held to discuss literature that deals with gender issues and female representation.

- **Engenheiras da Borborema:** this project is done since 2016 and aims to encourage high school students from public schools to choose a career in the field of STEM.

Wislayne Silva, current IEEE WIE UFCG SBAG Chair adds:

“Choosing a mostly male area as a profession can be intimidating for many women. But initiatives like WIE show us daily that although we are still few, we are together and we are strong. We can contribute with actions to change this scenario, and to encourage more girls and women to follow their dreams without gender being a limiting factor. Thus, we build a more just and equal world. After all, a woman’s place is wherever she wants to be!”

IEEE WIE UNIDAD PROFESIONAL INTERDISCIPLINARIA EN INGENIERÍA Y TECNOLOGÍAS AVANZADAS (UPIITA) SBAG, HONORABLE MENTION IN THE STUDENT BRANCH AFFINITY GROUP OF THE YEAR AWARD



Paola Aburto, current IEEE WIE UPIITA SBAG Chair shares with us:

“IEEE WIE UPIITA-IPN has grown little by little in recent years. We focus on developing activities for the personal increase of women who are in STEM areas. But the way has not been easy, in each activity we face lack of empathy, resources or workspaces, however, enthusiasm is never lacking. Our Affinity group is the biggest and the most active in Mexico City. Thanks to our work, we have seen favorable results and recently we won the Student Activities Committee (SAC) 2^o Place Success Case Regional Student Award 2019 - Affinity group category .

For instance, we made two disclosure events: “En sus marcas, listos...¡Ciencia!” in which 37 girls from a foster-school had a guided visit in the Biosignal Processing Laboratory of our school.

On the other hand, a congress called “Women in Power” was made with the help of PES members in the facilities of Benjamin Franklin Library of the U.S. Embassy in Mexico.

Additionally, we collaborated with humanitarian groups like Elige Mexico IPN and RedMX to create the “First Fair of Equity and Inclusion”.

Sometimes we do not know the scope of our ideas or projects, but finding a good team could help us to reach our goals and to improve our knowledge and skills. Moreover, no project is small when its objective is big: to change the world, first you need to change our communities and ourselves. As WIE volunteers we have found, not only a working group, but a family.”

IEEE WIE UNIVERSIDAD DON BOSCO (UDB) SBAG, HONORABLE MENTION IN THE STUDENT BRANCH AFFINITY GROUP OF THE YEAR AWARD



Fátima Oviedo, current UDB SB Chair and Past WIE SBAG Chair (2019) shares with us some words:

“We’ve been working in the development and growing of our affinity group WIE UDB, through these recent years, for the inclusion of women in STEM fields, and to motivate girls in science and technology careers. We have organized many activities where the participation of high school students has been crucial.

We also support institutional projects of the Universidad Don Bosco, sharing our common goal and created our own projects like WIMENTORING. This is a program based in a mentoring network for girls in their first years in the engineering school and a complimentary technical knowledge program with the support of our seven student branch chapters.

Thanks to this team work, we have won an Honorable Mention in the WIE Awards this year. For us, this a motivation to keep working in our mission

and vision, continuing promoting our University and let us know all over El Salvador Section through the cooperation with other associations.

We expect to keep motivating more women to feel capable of achieving their goals and demonstrate we all can contribute in technical fields, men and women to put our knowledge for the benefit of humanity.”

IEEE WIE ARGENTINA AG, HONORABLE MENTION IN THEAFFINITY GROUP OF THE YEAR AWARD



For the second year in a row, IEEE WIE Argentina wins an honorable mention in the category of WIE Affinity Group of the Year. With more than 74 members, they’ve developed the enthusiasm to keep inspiring, connecting and supporting young girls in the STEM fields.

Last year, they’ve successfully organized one of the International Leadership Summit (ILS) in the Region 9 which is now a Success case to talk about in our region.

WIE Argentina runs also a big initiative called RoboTeam, founded by IEEE volunteers with the support of different organizations in Argentina. The program’s mission is to promote the technology as an educative and social integration tool, to incentivize the technology innovation transversally for a sustainable development and to wake up those scientific/technical vocations as a development opportunity. RoboTeam has coordinated sessions of technological divulgation through ludic activities for children, using concepts of engineering, ludic exercise and motivational activities.

**ANA HELLEN CARVALHO DOS SANTOS,
HONORABLE MENTION IN THE INSPIRING
STUDENT MEMBER OF THE YEAR AWARD**



Ana has been volunteering in IEEE since 2016 as Student Branch Chair at the UFRB(Federal University of the Recôncavo of Bahia, Brazil) and multiple positions in her student branch after that. She currently holds the position of Student Representative in IEEE Northeast Brazil Section

About her experience in WIE, she shares: "After the end of my management within the Student Branch, I started working within the SAC of the Northeast Brazil Section as a representative of Affinity Groups of the Section, my main objective in this period was to provide assistance for the formation and reactivation of IEEE WIE Affinity Groups in the Section. I also instructed all 11 IEEE WIE Affinity Groups of the Northeast Brazil Section to carry out the WIE STAR Program."

She has carried out a membership campaign in the Northeast Brazil Section, to increase the number of IEEE WIE members in the Section, encouraging students and professionals to join. For this campaign she created the document "Compilation of Benefits IEEE WIE", which is widely used by groups to attract new members, this document was passed on to Affinity Groups from all over Brazil, through email and social networks, and is quite requested.

Her message to young women: "Always believe in your potential, when we believe in ourselves, we make our dreams come true and help other people achieve theirs. I believe that one of the missions of my life is to inspire, engage and encourage women, I do it with all my heart and courage!"

**ROSSANA GAUTO MORÁN, HONORABLE
MENTION IN THE INSPIRING STUDENT
MEMBER OF THE YEAR AWARD**



I started in IEEE in the year 2017 within my student branch, as IEEE WIE UNA SBAG Chair in 2018, part of the Executive Committee of IEEE PES UNA SBC in 2019, IEEE PES Day Ambassador from 2018 to 2020 in Paraguay in various categories, IEEE Young Professionals Paraguay Chair and Current Representative of student affinity groups in IEEE R9 SAC Team. Recently I was invited to join the IEEE PES WiP Membership & Marketing Committee.

Among the projects I was able to participate in and organize were science workshops, leadership and public speaking trainings, technical visits, very prestigious conferences, trips to international meetings, one of the activities that reached me the most was a workshop we organized on mini wind turbines, where I took my niece and since that day she is determined to follow a career in the area, my motivation is that more girls like her, know the fun within the STEM world.

The point I consider important: is not only to do many activities, but to see beyond that, to see who you want to reach with what you are doing and who you are working with, this way is when we are truly achieving the IEEE's motto, the advancement of technology for the benefit of humanity.

The message I would like to leave to other girls and women is this: It is never too late to take the first step to becoming what you think is "impossible", don't forget your dreams, or where you come from, what makes one great is to value the opportunities received and help others to receive them too, don't forget: the more you give, the more you receive.



IGNITE 2020 - A successful Virtual Activity in Argentina during the Pandemic

Ariana García, Luis Remez

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SUMMARY

IGNITE 2020 was planned as a two-day immersive face-to-face activity, aimed at training student volunteers from the Argentine Section. Due to the pandemic, it had to be done in virtual format, with very satisfactory results, as described below.

BACKGROUND

Volunteer training is a permanent need at the IEEE, particularly in the student sphere because they leave their universities when they finish their studies.

Although self-study information is available in the IEEE, for example in the Center for Leadership Experience (CLE) [1] and in Volunteer Resources [2], volunteers must also know and comply with the normative and operational context of their country and Section.

DESCRIPTION

Based on previous initiatives, towards the end of 2019 the Section's Student Activities Committee planned a 2-day face-to-face meeting, IGNITE 2020 Interactive Group for New Initiatives and Training for

Excellence, aimed at bringing together student and professional volunteers, provide them with institutional training and also give them the possibility to interact with each other, in scheduled activities and in their free time.

Volunteer interaction is a valuable (if not the most valuable) asset of volunteering. In fact, an old IEEE motto was "Networking the world."

However, when the pandemic made a face-to-face meeting impossible, it was decided to hold a series of virtual meetings, to at least deal with information and management issues and generate some degree of interaction.

The series featured 6 sessions, held during the weekends, starting by the end of May.

Google Meet was used, as it was freely available and easy to configure and use for organizers and participants, plus two interactive applications KAHOOT [3] and MIRO [4].

The agenda included talks on the following topics:

Session 1. IEEE, IEEE Region 9 and IEEE Argentina Section

Session 2. Affinity Groups (LMAG, WIE, YP) and HAC / SIGHT

Sessions 3 and 4. Chapters of Technical Societies: BTS, CIS, ComSoc, EDS, EdSoc, PSES, SSCS, SSIT, TEMS

Session 5. Interactive simulated organization of a technical talk

Session 6. Interactive simulated organization of a grant request.

Details of the event and each session can be found in the IEEE SAC Argentina website [5].

RESULTS AND CONCLUSIONS

The results were very satisfactory, according to the organizers evaluation and to the enthusiastic participation and comments of the attendees, which added up to 180 along the 6 sessions (some from other countries), lasting up to 3 hours without noticeable loss of attendees.

In addition, from the interaction between Branches and Chapters during IGNITE; nine joint activities were proposed, including a cycle of technical talks, and some of these are already taking place.

Regarding the impact of the activity in the region, some sections showed interest in the format of the event and replicated and adapted it to their local context. Moreover, some of the dynamics developed for IGNITE are being replicated in other events across the region.

It is also worth mentioning that, although virtual and face-to-face activities "are not the same", virtual ones reduce infrastructure needs and expenses and increase the availability of speakers and attendees, since to participate it might be enough to switch windows on the screen they are working on, eliminating travel times and costs and distance restrictions.

On the other side, there is an increasing number of activities (by IEEE and others) and the competition for audience is also increasing.

A useful complement is to make the recordings accessible on a public site (IEEE.tv, YouTube, etc.) to access them later via streaming.

In other activities we have used IEEE WebEx and ZOOM and, in the student environment, it is common to use WhatsApp for work meetings with few participants.

Virtual activities are not limited to technical talks. For example, our Student Branches UNSJ and UTN-FRSN successfully participated in the IEEE R9 HackTech COVID-19 carried out by virtual means. And, at the end of this year, from December 1 to 4, our Biennial Technical Congress IEEE ARGENCON 2020 [6], will be held online, using professional video conference resources available at the UTN-FRRE, technical co-organizer of the event.

We thank all those who participated in IGNITE 2020, organizers, speakers and attendees, and we remain available to receive comments, suggestions and queries via email.

REFERENCES

- [1] CLE - Center for Leadership Experience <https://iee-elearning.org/CLE/>
- [2] Volunteer Resources <https://www.ieee.org/about/volunteers/index.html>
- [3] KAHOOT <https://kahoot.com/>
- [4] MIRO <https://miro.com/>
- [5] IEEE SAC Argentina <https://site.ieee.org/argentina-sac/sac-team/ignite-2020/>
- [6] IEEE ARGENCON 2020 <http://www.argencon.org.ar>

AUTHORS

Ariana García - IEEE Member, Argentina Section, Student Activities Committee Chair

Luis Remez - IEEE Life Senior, Argentina Section, LMAG Chair



IEEE ARGENCON 2020 - <http://www.argencon.org.ar>



9no, Congreso Internacional de Mejora de Procesos de Software (CIMPS) 2020

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El **Congreso Internacional de Mejora de Procesos de Software (CIMPS)** se funda en el año 2012 bajo la presidencia del Dr. Jezreel Mejía Miranda y vicepresidencia de la Dra. Mirna A. Muñoz Mata.

El Congreso CIMPS esta dedicado a la **Ingeniería de Software**, en particular, **mejora de procesos de software, seguridad informática y tecnología de la comunicación y data análisis (big data)** con un enfoque de innovación y/o emprendimiento que parte de bases científicas. Esto ha logrado conjuntar a los sectores académico, gubernamental e industrial que impulsen el desarrollo integral de una cultura de innovación y competitividad de las organizaciones dedicadas y/o que hacen uso de las Telecomunicaciones de Información y Comunicación.

FILOSOFÍA

Desde sus inicios 2012, la filosofía de este congreso es abrir las puertas a toda la sociedad que tenga relación directa con el uso de las tecnologías de información y comunicación con enfoque en ingeniería del software. Esta filosofía se enriquece ya que durante las actividades de este congreso se reúnen a la triple hélice: La Academia, el Gobierno e Industria. Además, parte de la filosofía de este congreso es abrir a la comunidad estudiantil que

difícilmente podría asistir con sus propios recursos a este tipo de congresos. Creemos que acercar la ciencia a través de este congreso a la triple hélice con énfasis a la comunidad estudiantil abre el panorama a los estudiantes sobre que es la ciencia y como se lleva a cabo la investigación, lo cual permita sumar futuros investigadores que sean insertados en centros, instituciones académicas, empresas o inclusive en entidades de gobiernos que tendrán un impacto en la vida económica de nuestro país.

EDICIONES

El congreso CIMPS ha sido celebrado en sus 3 primeros años en Zacatecas, Zacatecas (2012-2014). Dado su crecimiento y proyección que tiene a nivel nacional e internacional ha sido solicitado por otras universidades apoyadas por los gobiernos estatales para que sea celebrado en Mazatlán, Sinaloa, 2015; y en la Ciudad de Aguascalientes, Aguascalientes, 2016, Zacatecas, 2017, Guadalajara 2018 y en 2019 en la ciudad de Leon, Guanajuato.

ACTIVIDADES:

Conferencias plenarias: impartidas por invitados tanto a nivel internacional, nacional y regional, que comparten su experiencia en proyectos de desarrollo de productos de software, seguridad de tecnologías

de información, big data y temas actuales presentado un enfoque de innovación y/o emprendimiento.

Exposiciones de artículos científicos: la presentación de los artículos aceptados tanto en idioma Español e inglés esta con base en tres modalidades:

- a) Artículo completo: Trabajos finalizados o consolidados R&D.
- b) Artículo de Industria o Compañía: artículos que muestren experiencia práctica, herramientas R&D, etc., enfocadas en el tópico principal del congreso.
- c) Artículo Poster: Trabajos en proceso con resultados preliminares relevantes, abiertos a discusión.

Talleres: enfocados en impartir conocimiento por expertos en las áreas de conocimiento tanto como investigadores como personas de la industria y academia. Esta actividad se enfoca en dar a conocer la investigación aplicada a soluciones reales.

FECHAS:

En el contexto actual de la situación económica y de salud que atraviesa no solo México sino el mundo, este año el congreso CIMPS por primera vez será llevado a cabo de manera virtual: **21 al 23 de Octubre del 2020**, en una franja horaria de 9:00 a 17:00 hrs.

MAS INFORMACIÓN:

Web site: <http://cimps.cimat.mx/>

Facebook: <https://www.facebook.com/CIMPS>

MAS INFORMACIÓN:

Cimps: conferencecimps@ciimat.mx

Presidente del evento: Dr. Jezreel Mejía Miranda, jmejia@ciimat.mx

Vicepresidente: Dra. Mirna A. Muñoz Mata

mirna.munoz@ciimat.mx



Imagen 1. Inauguración CIMPS 2019, Instituto Tecnológico de León, Guanajuato, México.



Apoyando la realización de pruebas de software en Pymes

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Actualmente las pequeñas y medianas empresas, denominadas Pymes, representan un 87% de la industria de desarrollo de software en México (Mexican Association of Information Technology Industry)(AMITI: Outline of government support for Software Industry, 2010). Por lo tanto, las Pymes han incrementado el uso de marcos de trabajo para la realización de pruebas de software, el cual es un requisito cada vez más solicitado en el desarrollo de proyectos de software. Durante el ciclo de vida de dicho desarrollo, las pruebas son un componente crítico y necesario para el aseguramiento de la calidad de los productos y servicios de software (Mustafa, Al-Qutaish, & Muhairat, 2010) y es una de las actividades consideradas más retadoras y también pueden llegar a ser costosas.

En este contexto, existen diferentes modelos y estándares que indican dentro de sus procesos prácticas acerca de la implementación de pruebas del software como lo es el Modelo CMMI 2.0(CMMI, 2020), TMMi, estándares como el ISO/IEC 29110(ISO, 2016), así como las metodologías tradicionales como TSP o metodologías ágiles como SCRUM (SCRUM, 2020). Sin embargo, las empresas conocidas como Pymes tienen una gran falta de cultura de procesos y se enfrentan al reto de saber cómo implementar de una manera correcta las pruebas indicadas en ellos. Además, la implementación depende de la

experiencia de las personas que tienen el rol para aplicar pruebas del software en el entorno de desarrollo.

MODELO PROPUESTO PARA PYMES

Con la finalidad de dar apoyo a las Pymes se propone un modelo de madurez para la implementación de pruebas de software en entornos MiPymes. Por lo cual se propone: **dos niveles de madurez, dos niveles de profundidad y el tipo de pruebas** (véase Imagen 1).

Nivel de madurez	Nivel de profundidad	Tipo de Pruebas	Pruebas				
Nivel 1	Caja Negra	Funcionales	Unitarias	Componente	Integración	Sistema	Aceptación
	Caja blanca		Parámetros de rendimiento / Automáticas				
Nivel 2	Caja negra	No funcionales / Estructurales	Seguridad	Rendimiento	Usabilidad	Accesibilidad	
	Caja blanca		Parámetros de rendimiento / Automáticas				

Imagen 1. Distribución del modelo propuesto.

NIVEL DE MADUREZ

En el modelo se consideran dos niveles de madurez, Para cada nivel, es necesario cubrir ciertos objetivos específicos y genéricos. A medida que la organización, el equipo de trabajo o el encargado de realizar las pruebas de software, logra el cumplimiento de los objetivos, aumenta la madurez organizativa y por consiguiente cosecha los beneficios de la mejora de procesos.

1. En el nivel 1 se encuentran las pruebas Funcionales, siendo estas las pruebas más básicas que se pueden realizar al programa del software.
2. En el nivel 2 se encuentran las pruebas No funcionales / Estructurales, siendo estas las pruebas con más complejidad que las anteriores. Los objetivos que se consideran para este nivel son los siguientes:

NIVEL DE PROFUNDIDAD

En cada nivel de madurez se presenta dos niveles de profundidad, nivel de caja negra y nivel de caja blanca.

1. El nivel de profundidad caja negra por su definición, son pruebas que se realizan de manera funcional, basándose estas en las especificaciones y resultados esperados por el sistema.
2. El nivel de profundidad caja blanca por su definición, son pruebas estructurales las cuales se realizan teniendo el conocimiento de la estructura del código y sus detalles de implementación. Para este nivel de profundidad se establecen indicadores de rendimiento como lo son: velocidad, índices de satisfacción del cliente, cantidad de defectos.

TIPOS DE PRUEBA

Los tipos de prueba que contempla este modelo son las siguientes:

Pruebas funcionales: aquellas que se realizan para verificar la parte funcional del software.

Prueba unitaria: cada una de estas pruebas valida un módulo único, las cuales se basan en el diseño técnico con el que fue construido.

Prueba de integración: se realizan al combinar dos o más módulos, anteriormente probados de manera unitaria.

Prueba de sistema: para validar y verificar la especificación del diseño funcional.

Prueba de aceptación: se realizan en conjunto con el usuario, con el objetivo de que el cliente acepte o rechace el sistema (Sommerville, 2011).

Pruebas No funcionales / Estructurales: Con el propósito asegurar que los aspectos no funcionales de la aplicación se prueben y que la aplicación

funcione bien en el contexto de la misma, cumpliendo con las expectativas comerciales.

Prueba de seguridad: evalúan el grado de protección del elemento que se encuentre a prueba de modo que las personas o sistemas no autorizados no puedan utilizar, leer o modificar el elemento [6].

Prueba de rendimiento: para demostrar que el sistema cumple sobre los límites del mismo especificados en los requerimientos (Sommerville, 2011).

Prueba de usabilidad: evalúan las especificaciones de usuario para alcanzar los objetivos asignados con eficiencia y satisfacción en un contexto específico de uso.

Prueba de accesibilidad: tienen como propósito el determinarse el objeto de ensayo a probar puede ser operado por el usuario con el mayor número de características y capacidades.

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CALL FOR NOMINATIONS

To: Members of IEEE Region 9 Regional Committee

From: Teofilo J Ramos, Nominations Committee Chair

Subject: Nominations of candidates to Region 9 Director-Elect 2022-2023

Deadline: 15 OCTOBER 2020, 12:00PM UTC/GMT – 5

On behalf of IEEE Region 9 Nominations Committee (R9NC), I am inviting you to send nominations of candidates for the position of Region 9 Director-Elect 2022-2023 (Region Director 2024-2025). **The deadline for receiving nominations (Annex 1 format) is October 15, 2020. Upon reception of nominations, the Region 9 Nominations Committee will ask each candidate to present by October 30, 2020 a biography, a statement of plan and program for the performance of duties and a letter confirming the desire to serve, as it is indicated in the Annex 2.**

From October 31, 2020, the Region 9 Nominations Committee will examine the proposals received and make its recommendation of the pre-candidates to Region 9 Regional Committee, for approval and the selection of candidates for the 2021 elections, at the 2021 Region 9 Regional Meeting.

Region 9 Nominations Committee is composed of the immediate past director (Teofilo Ramos (Mexico), the three most-recent past Regional Directors: Antonio Ferreira [Brazil], Norberto Lerendegui [Argentina], Gustavo Giannattasio [Uruguay]), and two additional non-past-director members, appointed by the 2020 Regional: Committee Mauricio Quiñones (El Salvador) current CAPANA Council Chair and Carlos Monsalve (Ecuador), past Section Chair

The Regional Director-Elect elected by members in Region 9 shall reside in the Region, be of Senior Member Grade or higher and have experience in regional activities, either through participating in the Regional Committee or Chair of Section/Committee. The candidate should know IEEE beyond the limits of his/her section.

Since candidates will represent Latin America and Caribbean, they should be able to express their ideas in the English language when working as member of the IEEE Board of Directors and the IEEE Member and Geographic Activities Board.

Obviously, the vocation of service is not enough, but it is also necessary to have enough time to devote oneself to serving selflessly to meet the requirements of the Region, the different Sections, as well as the Members in general. It is essential to have a good dose of enthusiasm, leadership and creativity and great ability to create consensus.

By criteria of rotation, explicit in Regional Bylaws, candidates cannot be presented from countries represented by the Region Director-Elect, Region Past-Director and the Region Director in office (Panama, Mexico and Ecuador). Also, after completion of the term of service as Region 9 Director, individuals shall not be eligible to serve a second full term.

The person elected will serve for a period of two (2) years as Region 9 Director-Elect (2022-2023), two years (2) as Region 9 Director (2024-2025), and finally two (2) years as Region 9 Past-Director (2026-2027).

Process

The following process will be used by the Region 9 Nominations Committee to prepare the list of candidates.

1. Any member of the R9, preferably a volunteer of the Regional Committee, may propose candidates for Region 9 Director-Elect position. The nominator must provide the candidate's qualifications, short biography and will to serve. **Nominations must be presented in English, in the form provided in Annex 1** and shall be received by the N&A Committee by October 15, 2020, 12:00PM UTC/GMT -5, by e-mail to t.ramos@ieee.org
2. Upon reception of proposals, the Region 9 Nominations Committee will ask each candidate for a biography, a statement of plan and program for the performance of duties and a letter confirming the desire to serve, as it is indicated in the **Annex 2**. This documentation will have to be submitted by the candidate by 30 October 2020. Since this document will be sent to the IEEE headquarters, the information must be presented in English.
3. After collecting all nominations, the Region 9 Nominations Committee will select not less than two (2) and not more than three (3) potential candidates whose names will be submitted to the Regional Committee for consideration in the next regional meeting (2021). The chair of Region 9 Nominations Committee will inform the Regional Director on its recommendation preferably before the end of 2020. The Regional Director will then inform the nominees and members of the Regional Committee on the decision of the Nominations Committee.
4. Candidates, evaluated but not selected by Region 9 Nominations Committee, can be nominated no later than ten days prior to the 2021 R9 Regional Committee meeting if the signatures of eleven voting members of the R9 Regional Committee accompany the nomination. Nominations shall be submitted to a designee specified by Region 9 Director, who will promptly inform the R9 Regional Committee members of those nominees qualifying under this provision.
5. The Regional Committee will receive the list of the proposed qualified candidates for the Director-Elect position before the Region 9 Regional Meeting 2021. For each candidate, there will be a biography, IEEE activities record, plan and program for the performance of duties and the letter confirming the desire to serve.
6. The Regional Committee, by secret voting during the plenary session of the Region 9 Regional Meeting 2021, will select a slate of a minimum of two and maximum of three preliminary candidates, who will be the candidates recommended by Region 9. Region 9 Director shall submit this slate to the IEEE Board of Directors by March 15 of 2021.

Teofilo J. Ramos
IEEE Region 9 Nominations Committee, Chair 2020-2021

Annex1

NOMINATION FORM CANDIDATE FOR DIRECTOR ELECT, 2022-2023		
Name of Nominee:		
E-Mail:		
IEEE Grade and Section		
Current position in the IEEE:		
COMMENTS FROM THE NOMINATOR: Include a brief assessment of the experience and attributes of the candidate to develop the position of being elected.		
BRIEF BIO OF THE NOMINEE: Include a brief curriculum vitae including activities in the IEEE as a volunteer (not more than 200 words).		
Does the nominee to Director-Elect agrees to serve in this position if elected?	Yes	No
Nominator:	E-Mail:	
Date of this presentation:		

Annex 2

Documents requested from the potential candidates for the position of Regional Director-Elect 2022-2023

1. Recent photo

- 1a. Photograph must be taken on or after 15 August 2019
- 1b. As required by IEEE Policy, candidates are required to attest the photograph age (short email stating when or if the photograph was taken after 15 August 2019)
- 1c. Photograph format is high-quality digital color in either TIFF or JPEG format, 300 DPI resolution, and minimum size of five inches across when printed
- 1d. [IEEE Policies, Section 13.7.2.A.](#)

2. Nominee's biography in two sections:

- 2a. Biography (150 words), indicating your professional and academic activities, without your IEEE activities.
- 2b. IEEE positions in the following order and sequence: Board (s), Region, Section, Chapter, Student Activity, Society, Conference, Other. [See example.](#)

IEEE ACTIVITIES: (S'84-M'86-SM'02)

COMMITTEES/BOARDS: Information Strategy Committee, 2004-5; RAB/TAB Section/Chapter, Chair, 1999-2000, RAB Student Activities, 1992-95; Educational Activities Board, 1994-1996

REGIONS: Region 6: Executive Committee, 1988-; Treasurer, 1992-93; Awards, 1988-92; Communications, 1998-present, Vice Chair 2001-2002

SECTIONS/CHAPTERS: Piscataway Section Chair, 1983-84; Vice Chairman, 1979-80; Treasurer, 1978-79; Industrial Applications Society Chapter, Past Chairman, 1987-88; Chairman, 1986-87; Vice Chairman, 1985-86.

STUDENT BRANCHES: University of Alabama at Birmingham, Counselor, 1982-; University of Alabama in Huntsville, Counselor, 1976-81.

SOCIETY: Communications Society: Member, Board of Governors (2005-2007), Director, Latin American Region Director (2006-2008); Power and Energy Society: Representative, Region 9 PES Chapter North Area, 2002-2004

CONFERENCES: CONCAPAN: Conference Chair – 2005, Conference Treasurer – 2004; Technical Program Coordinator -2003

OTHER: Member Computer Society, Education Society, Professional Communications Society, Management Society; Andean Council: Interim Chair, 2001; Secretary/Treasurer, 2002.

3. Statements:

- 3a. A position statement of 175 words. If elected to the position of Regional Director, what is your plan?
- 3b. A list of your major contribution (s) (up to five) to IEEE in your previous positions. This information will be combined with position statement, 2.a. (no longer than 300 words)
- 3c. Please provide a written statement about your formal acceptance of this nomination and your agreement to serve, if elected, in the Position of Director-Elect 2022-2023 and Regional Director 2024-2025 by promising to fulfill, with commitment all the responsibilities.



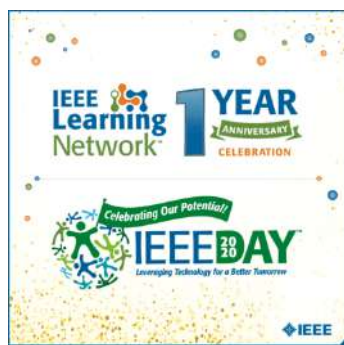
IEEE Day 2020 Will Be Virtual!

On 6 October 2020, we are celebrating IEEE Day virtually! We will once again honor IEEE members around the world with this year's theme, **"Leveraging Technology for a Better Tomorrow"**

The event's organizing team is excited to be able to engage members from around the world with the virtual events and collaboration activities. What's more, to accommodate those sections that prefer to hold weekend events, celebrations will be held throughout the first two weeks of October.

For those of you who are planning events, IEEE Day organizers have created a helpful [IEEE Day-in-a-Box](#) Powerpoint kit. Located under the resources tab on the [IEEE Day website](#), the kit walks you through the steps of the planning process.

The [toolkit section](#) of the website includes posters, banners, and other promotional materials that can be downloaded. For those who want to show their pride or distribute T-shirts to their virtual participants or speakers, there are downloadable [templates](#) with this year's design and color scheme.



Another good news is about [IEEE Learning Network](#), the IEEE continuing education site, wants to announce about another 10 for \$10! Check out this selection of courses that active IEEE professional members and student members can purchase for US\$10 each. The code (ILNIEEE2020) will be live on 1 September 2020 and end on 31 October 2020 for [these courses](#).

It's not too early to start planning! Check the [IEEE Day website](#) and contact your Regional Lead who is ready to assist you. We also encourage you to follow IEEE Day on social media for future updates and spread the word on your own social platforms.

We are excited about IEEE Day 2020 and hope you join us on 6 October for this incredible virtual celebration! Please feel free to [contact us](#) with any questions.





IEEE WIE INTERNATIONAL LEADERSHIP SUMMIT



BRAZIL,
COLOMBIA
PANAMA



FROM 28 SEPTEMBER TO 2 OCTOBER
2020



VIRTUAL EVENT

About IEEE WIE ILS

IEEE WIE International Leadership Summits were launched as a part of IEEE WIE's portfolio of global initiatives that focus on Inspiration, Leadership, Empowerment and Entrepreneurship mid to senior women in technology. The summits provide opportunities for networking, mentorship, and collaboration.

In this year of 2020, IEEE WIE Summits are shifting to virtual platforms. In IEEE Region 9 (Latin America and Caribbean), the three awarded hosts got together to strengthen the WIE mission and vision. The joint ILS event aims to unit the best of each country and reach further horizons beyond country borders and language barriers. Join us throughout a whole week of talks and panels with precious people of our society.



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Brazil



Medellin
Colombia



Panama City
Panama

MORE INFORMATION

r9.ieee.org/wie/joint-ils-2020



[instagram.com/ieee.wie.r9](https://www.instagram.com/ieee.wie.r9)





IEEE WIE INTERNATIONAL LEADERSHIP SUMMIT

September 28 to October 2, 2020

Joint Virtual Event



Brazil
Colombia
Panama



About IEEE WIE ILS

IEEE WIE International Leadership Summits were launched as a part of IEEE WIE's portfolio of global initiatives that focus on Inspiration, Leadership, Empowerment and Entrepreneurship mid to senior women in technology. The summits provide opportunities for networking, mentorship, and collaboration.

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FOR MORE INFORMATION
www.r9.ieee.org/wie/joint-ils-2020





IEEE Day–6 October 2020

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Facultad de informática mazatlán - universidad autónoma de sinaloa

Call for Papers

Three types of papers in english or spanish can be submitted

- **Full paper:** Finished or consolidated R&D works. These papers will be assigned an 10/14-page limit.
- **Company or industrial paper:** papers that show practical experience, R & D, tools, etc., focused on main topic of the conference. These papers will be assigned to a 6/8-page limit.
- **Poster paper:** Ongoing works with relevant preliminary results, will be opened to discussion. These papers will be assigned a 4-page limit.

All submissions will be reviewed on the basis of relevance, originality, importance and clarity. Theoretical papers must make a convincing argument for the Relevance of the results to Software Processes Improvement, Security in Information and Communication Technology, Big Data and Covid-19 Field. All topic areas related to Software engineering focused but not limited to Software Processes improvement and Security in Information and Communication Technology Covid-19 Field work. Submitted papers should follow the main themes proposed for the Conference (the topics proposed were not intended as restrictive):

1. Organizational Models, Standards and Methodologies
2. Knowledge Management
3. Software Systems, Applications and Tools
4. Information and Communication Technologies
5. Processes in non-software domains (Mining, automotive, aerospace, business, health care, manufacturing, etc.) with a demonstrated relationship to software process challenges

Submitted papers must comply with the format in doc file, must be written in English or Spanish, must not have been published before, not be under review for any other conference or publication and not include any information leading to the authors' identification. Therefore, the authors' names, affiliations and bibliographic references will be not included in the version for evaluation by the Program Committee. This information will be only included in the camera-ready version, saved in Word format. All papers will be subjected to a "double-blind review" by at least two members of the Program Committee. Based on Scientific Committee evaluation, a paper can be accepted or rejected by the Conference Chairs. In the later case, if a submitted full or company paper do not cover the requirements to be accepted in the type of paper originally submitted, the conference chair can propose the paper to another type, in this case, a full or company paper can be accepted as a poster paper only. In this case, the authors of accepted poster paper should make and print a poster that must be exhibited and presented during the Conference. This poster should follow the specified requirements.

Time to present the papers:

The authors of accepted full and company or industrial papers will have 15 minutes to present their work in a Conference Work Session; approximately 5 minutes of discussion will follow each presentation. The Conference include Work Sessions where the posters papers will be presented and orally discussed, with a 5 minute limit per poster.

COVID-19 Pandemic:

The authors of accepted articles that cannot attend the congress may present their article by videoconference.



Equipo Editorial del NoticIEEEero 2020

La principal función del equipo editorial, es diseñar la revista bimestral de la información más relevante en IEEE Región 9 - Latinoamérica y El Caribe.



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