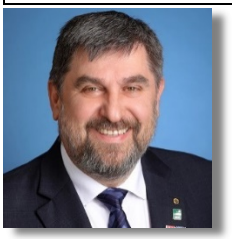
IEEE TEMS LATINAMERICA INDUSTRY FORUM 2023

Program and Bio of speakers

DAY	Time EST	Speaker	Affiliation	Topic	Country
May-30	9:00	Dejan Milojicic	IEEE FDC, HPE	The Art of Predicting Technology	USA
	9:45	Roberto Saracco	IEEE FDC	Future Technologies and Metaverse	ITALY
	10:30	Ramesh Ramadoss	IEEE Blockchain	Blockchain, Web3 & Metaverse	USA
	11:15	Senthil Vijayakumar	Kelly Services. Leader of Data Science Team	Quantum Computer Neural Networks	INDIA
	12:00	Stephen Ibaraki	IEEE IISEC TEMS, REDDS Capital	Metaverse leaders and trends	CANADA
	12:45	Narendra Mangra	IEEE Sandards	Transdisciplinary Framework for Smart Agriculture	USA
	13:30	Susana Lau	IEEE Panama	Entrepreneurship	PANAMA
	14:15	Ashutosh Dutta	IEEE Future Networks	5G Networks, Applications and Security	USA
	15:00	Eduardo Ahumada	Baja California University	Happiness Management	MEXICO
DAY	**Time EST**	**Speaker**	**Affiliation**	**Topic**	
May-31	9:00	John Munro	PMI Disciplined Agile	Disciplined Agile	CANADA
	9:45	RicardoTriana	PMI LATAM	How power skills are re-defining project success	COLOMBIA
	10:30	Sergio Conte	PMI Argentina	Business Analysis beyond the project	ARGENTINA
	11:15	Ricardo Armentano	UDELAR	Integrated Intelligence, eHealth	URUGUAY
	12:00	Luis Kun	IEEE SSIT	Holistic Approach to Achieve Citizen Safety and Security	USA -URUGUAY
	12:45	Wei-Jen Lee	University of Texas	Climate Change	USA
	13:30	Roxana Saint Nom Juan Galindo	IEEE R9 Industry comittee	Future of work Panel	ARGENTINA COLOMBIA
	14:15	Cesar Viloria	Uninorte Universidad Colombia	Arquitectura Empresarial en TI	COLOMBIA
	14:45	Andrea Belz	IEEE TEMS President Elect	TEMS Society	USA

Dr. Dejan Milojicic, HPE Labs, IEEE FDC committee (May 30, 9:00 Eastern Time EST)



Dejan Milojicic is a distinguished technologist at Hewlett Packard Labs, Palo Alto, CA [1998-present]. Previously, he worked in the OSF Research Institute, Cambridge, MA [1994-1998] and Institute “Mihajlo Pupin”, Belgrade, Serbia [1983-1991]. He received his PhD from the University of Kaiserslautern, Germany (1993); and his MSc/BSc from Belgrade University, Serbia (1983/86). His research interests include systems software, distributed computing, systems management, and HPC. Dejan has over 240 papers, 2 books and 79 patents. Dejan is an IEEE Fellow (2010), ACM Distinguished Engineer (2008), and HKN and USENIX member. Dejan was on 8 PhD thesis committees, and he mentored over 50 interns. Dejan was president of the IEEE Computer Society (2014), IEEE presidential candidate in 2019, editor-in-chief of IEEE Computing Now and Distributed Systems Online and he has served on many editorial boards and TPCs. Dejan led large industry-government-university collaborations, such as Open Cirrus (2007-2011) and New Operating System (2014-2017).

Title: The Art of predicting technology evolution

Abstract: Predictions have always attracted interest, because seeing the future could be very useful, powerful, and also fun. Those who can predict ahead of others have a strategic advantage. Predictions are essential in business, the military, and healthcare. As of recently, with COVID and with recent wars, predictions became critical to humankind's survival: for predicting when to open or close countries, predicting supply chains, vaccines, etc. Predictions are hard because they depend on many factors. There is a social aspect to making any prediction that pertains to humans hard. There is an ecological aspect that is extremely complex on its own. Technology predictions may be simplest, but technology also depends on business success, i.e. economics. For these reasons, technology predictions are a combination of art, science, and business.

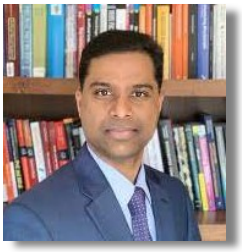
Professor Roberto Saracco.	IEEE FDC Committee (May 30, 9:45 Eastern Time EST)

Roberto Saracco fell in love with technology and its implications long time ago. His background is in math and computer science. Until April 2017 he led the EIT Digital Italian Node and then was head of the Industrial Doctoral School of EIT Digital up to September 2018. Previously, up to December 2011 he was the Director of the Telecom Italia Future Centre in Venice, looking at the interplay of technology evolution, economics and society. At the turn of the century he led a World Bank-Infodev project to stimulate entrepreneurship in Latin America.

Title: The inevitability of the Metaverse

Abstract: Technology evolution along business evolution is steering towards a world where bits and atoms co-exist and where personal experience results from a merging of the physical space with the digital one. We are already partially living in this dual world and it will be more so in the future. We will lose perception of the difference between the two. Our reality will be the result of that merging. The Metaverse is not out there, it is right here where we live.

Dr. Ramesh Ramadoss	IEEE Blockchain Technical Committee (May 30, 10:15 Eastern Time EST)



Ramesh Ramadoss is an entrepreneur, author, researcher, and international speaker. He is a co-chair of the IEEE Blockchain Technical Community. He is a member of the Board of Governors of the IEEE Standards Association. He serves on the Expert Panel of the European Union Blockchain Observatory and Forum. He has conducted projects for DARPA, NASA, the U.S. Army, the U.S. Air Force, Sandia National Labs, and Motorola Labs. He is the author or coauthor of one book, three book chapters, and 55 research papers. He earned his Bachelor of Engineering degree from Thiagarajar College of Engineering, Madurai, India, and his Ph.D. degree in electrical engineering from the University of Colorado at Boulder, USA.

Title: Blockchain, Web3 & Metaverse

Abstract: Over the last decade, the field of blockchain and Distributed Ledger Technology (DLT) has evolved to encompass a collection of novel distributed computer network architectures implemented using various consensus protocols, data structures, and economic incentive models. This talk will provide an overview of blockchain/DLT applications in startups, enterprises, and government services. Also, this talk will share some recent developments in the areas of Web3 and Metaverse. Web3 is an idea for the next iteration of the World Wide Web (WWW), which aims to incorporate some concepts such as Decentralized Internet, blockchain/DLT technologies and token-based economic models. The metaverse is the next iteration/evolution of the Internet, featuring 3D virtual environments enabled by personal or mobile computing with virtual and augmented reality headsets. The metaverse is described as a means of creating immersive digital spaces for a range of human activities.

Dr. Senthilkumar Vijayakumar, Kelly Services (May30, 11:15 Eastern Time EST)

Currently, Senthil Vijayakumar is Leading Data Science Team in Kelly Services. In this role, He is responsible for leading the Data Science team in devising and developing cutting-edge AI/ML and Data Science solutions and products for Kelly's various business units to achieve Business Transformation and Value-driven outcomes. He has filed many patent applications and also been granted patents in India and the United States. He published Novel AI/ML Methodologies & Approaches in Research proceedings (IEEE) & Technology Conferences (SNIA & NVIDIA GTC). Recently, a poster titled "Contextual and Spatial Attention Model: Transfer Learning-based Hybrid QNN Paradigm for Computer Vision Applications" was chosen for publication in one of the prestigious proceedings of IEEE Quantum Week: the IEEE International Conference on Quantum Computing and Engineering (QCE), Sept ,2022, USA. Team Leader for Team "TCS-Tridents" and Won Excellent Implementable Idea Award in SAMHAR-COVID19 Hackathon for the solution "A Novel Methodologies to Detect COVID-19 from CT Scans & Patient Clinical Parameters leveraging Transfer Learning for Computer Vision and Quantum Neural Networks" organized by CDAC, a Ministry of Electronics & Information Technology (MeitY) and Department of Science & Technology (DST) initiative, in association with NVIDIA & OpenACC. He enjoys empowering students and college faculty through sessions/workshops/FDP (50+ conducted) and Academia Board of Studies (BOS) Member on various topics like AI/ML, Data Science, NLP and Computer Vision. He has been invited as a mentor, speaker, judge, and evaluator to deliver technical sessions and evaluations at various junctures during IEEE conferences and Smart India Hackathon. Industry and academia have recognized him with a number of awards for his contributions & accomplishments, which he considers an honor.

Title: HCV Detect QNet: A Hybrid QNN-Based Framework for Accurate Early Detection of Liver Abnormalities from CT Scans using Custom Transfer Learning and AI Edge Device

Abstract: The discovery of the Hepatitis C Virus (HCV) by Drs. Harvey J. Alter, Michael Houghton, and Charles M. Rice was recognized with the 2020 Nobel Prize in Medicine, and their groundbreaking work has paved the way for effective treatments for HCV. Despite this, early detection and diagnosis remain critical for successful management of the disease. Computed Tomography (CT) is a widely used imaging technique that can detect liver lesions and other abnormalities associated with HCV infection. However, interpretation of CT scans can be challenging, time-consuming, and subject to inter-observer variability, making it difficult for radiologists to accurately diagnose HCV. In recent years, the development of Artificial Intelligence (AI) and Computer Vision (CV) techniques has opened up new possibilities for medical image analysis, allowing for the development of AI-based diagnostic products that can assist radiologists in the interpretation of CT scans and improve the accuracy and speed of HCV diagnosis.

Stephen Ibaraki	REDDS Capital -- Venture Capital Investments,
(May 30, 12:00 Eastern Time EST)	

Stephen is a serial entrepreneur, investor, futurist with 300+ recognitions/awards. His leadership working daily with more than 1 million CEOs, investors, scientists and notable authorities, with the world's leading CEO, scientific, technical, health, governments, UN, and financial organizations allow him a unique vantage point to oversee where investments and transformative global innovation is heading in the coming years. He is founding chair YPO Impact Advisory Board and previously the YPO EIS Advisory Board. Stephen is the Recipient of 20 Microsoft Global Awards (2018-2023 in AI). He is a contributor to Forbes / IT World Canada on leading new investments, innovation, entrepreneurship.

Title: Metaverse Leaders and Trends

Abstract: The Metaverse Leaders and Trends keynote provides top trends, impacts, innovations, investments, snapshots of leader interviews, startups, with a spotlight on AI -- all powering the confluence of transformational technologies of the 10th Machine Age.

PM. Narendra Mangra	IEEE SA Transdisciplinary Framework IC
(May 30 Time 12:45 Eastern Time EST)	

Narendra Mangra is the Principal at GlobeNet LLC, where he provides advisory and consulting services across industry, government, and academia. His diverse experience spans strategy development, smart city roadmap development, spectrum management, mobile network planning and system deployments, enterprise-wide modernization, program management, and education. He teaches graduate courses on 5G and project management with a focus on smart cities at the George Mason University. Narendra also leads several IEEE initiatives on technology roadmap development, smart cities architecture standards development, and industry connections on telehealth and the transdisciplinary framework with a focus on agriculture. These initiatives aim to systematically extend the reach and depth of agriculture, public safety, telehealth, smart cities, and rural development using a transdisciplinary framework that integrate business ecosystems, networks, and governance functions.

Title: Agriculture as a Catalyst for Food Supply, Smart Communities, and Climate Resiliency

Abstract: Agriculture plays an important role in feeding the global population, fostering rural development and smart communities, and reducing the overall global carbon footprint for climate resiliency. A transdisciplinary framework with integrated business ecosystems, networks, and governance functions facilitates collaboration across different stakeholder groups across the end to-end agriculture ecosystem in a sustainable and systematic manner.

M.SC Susana Lau.	IEEE Entrepreneurship (May 30 Time 13:30 Eastern Time EST)

Susana Lau es Ingeniera en Electrónica y Telecomunicaciones (2011), con Máster en Tecnologías de Información, becaria Fulbright-Senacyt de Carnegie Mellon University (2015), Estados Unidos.

Title: Product Market Fit: Creando productos enfocados en un mercado que los vaya a comprar

Abstract: "Product Market Fit: Creando productos enfocados en un mercado que los vaya a comprar" trata sobre la importancia de entender las necesidades y deseos del mercado para crear productos exitosos. Susana Lau compartirá sobre la necesidad de identificar un mercado objetivo y comprender sus problemas y frustraciones. A partir de ahí, se pueden diseñar soluciones que satisfagan sus necesidades de manera efectiva.

Dr. Ashutosh Dutta	Johns Hopkins University Applied PHysics Lab (May 30 Time 14:15 Eastern Time EST)

Ashutosh Dutta is currently Chief 5G Strategist and JHU/APL Sabbatical Fellow at Johns Hopkins University Applied Physics Labs (JHU/APL), USA. He also serves as Chair for Electrical and Computer Engineering for Engineering Professional Program at JHU. His career, spanning more than 30 years, includes Director of Technology Security and Lead Member of Technical Staff at AT&T, CTO of Wireless at a Cybersecurity company NIKSUN, Inc., Senior Scientist in Telcordia Research, Director of Central Research Facility at Columbia University, adjunct faculty at NJIT, and Computer Engineer with TATA Motors. Ashutosh is author of more than 120 technical papers and 31 issued patents. Ashutosh is co-author of the book, titled, “Mobility Protocols and Handover Optimization: Design, Evaluation and Application” published by IEEE and John & Wiley. As a Technical Leader in 5G and security, Ashutosh has been serving as the founding Co-Chair for the IEEE Future Networks Initiative that focuses on 5G standardization, education, publications, testbed, and roadmap activities. Ashutosh is IEEE Communications Society's Distinguished Lecturer for 2017-2020 and as an ACM Distinguished Speaker (2020-2022). Ashutosh currently serves as chair for IEEE Future Networks Technical Community and Member-At-Large for IEEE Communications Society. He co-founded the IEEE STEM conference (ISEC) and helped to implement EPICS (Engineering Projects in Community Service) projects in several high schools. Ashutosh has served as the general Co-Chair for the IEEE STEM conference for the last 10 years. Ashutosh served as the Director of Industry Outreach for IEEE Communications Society from 2014-2019. He was recipient of 2009 IEEE MGA Leadership award. Ashutosh is recipient of IEEE-USA’s 2010 Professional Leadership Award, 2022 IEEE-USA George F. McClure Citation of Honor. He also received 2022 IEEE North American Region Exceptional Service Award. Ashutosh served as Member-At-Large for IEEE Communications Society for 2020-2022. Ashutosh

has served as the founding Co-Chair for the premier IEEE 5G World Forums and has organized 85 5G World Summits around the world. Ashutosh currently serves as the Chair for IEEE Industry Connection's O-RAN activities and IPv6. Ashutosh is a Distinguished Alumnus of NIT Rourkela with BS in Electrical Engineering, MS in Computer Science from NJIT, and Ph.D. in Electrical Engineering from Columbia University under the supervision of Prof. Henning Schulzrinne. Ashutosh is a Fellow of IEEE and Distinguished member ACM."

Title: 5G Networks, Applications and Security

Abstract: With the rapid proliferation of 4G and 5G networks, mobile operators have now started the trial deployment of network function virtualization (NFV), and software defined networking (SDN) especially with the introduction of various virtualized network elements in the access and core networks. 5G and 6G networks promise to support emerging applications such as enhanced mobile broadband, ultra-low latency, massive sensing type applications while providing the resilience in the network. While NFV and SDN open up the door for flexible networks and rapid service creation, these also offer both security opportunities while also introducing additional challenges and complexities, in some cases. This talk addresses evolution of cellular technologies towards 5G/6G and discusses various market verticals and new applications that can be supported using the new technologies. The talk also focuses on various security challenges and opportunities introduced by SDN/NFV and 5G networks and enablers such as Hypervisor, Virtual Network Functions (VNFs), SDN controller, orchestrator, network slicing, cloud RAN, edge cloud, and virtual security function. Additionally, this talk introduces a threat taxonomy for 5G security from an end-to-end system perspective, potential threats introduced by these enablers, and associated mitigation techniques. At the same time, some of the opportunities introduced by these pillars are also discussed. This talk also highlights some of the ongoing activities within various standards communities including open-source consortiums, large scale NSF testbeds, and illustrates a few deployment use case scenarios.

Dr. Eduardo Ahumada Universidad Autónoma de Baja California, México
(May 30 Time 15:00 Eastern Time EST)

Profesor - Investigador de la Universidad Autónoma de Baja California (UABC) con sede en la ciudad de Tijuana, México.

Title: Happiness management as a strategy in technology road mapping and organizational intelligence

Abstract: The concept of happiness management is related to human factor inside firms and organizations. Engineers leaders should design strategies based on people to improve technological road mapping and organizational intelligence. These two concepts have also acquired importance in the modern turbulent business environment to develop sustainable competitive advantages. This presentation provides current theoretical and practical applications based on these three variables and focus on increase competitiveness using technology tools and by creating intelligence inside the organization.

PMP, PMI-ACP John Munro PMI Global Agile and Business Transformation Lead
(May 31 Time 9:00 Eastern Time EST)

John Munro PMP, is PMI's Global Agile and Business Transformation Lead. His experience with Agile dates to 2006 while helping a prominent firm increase their time to market for a $4.5B online
ordering system. Since that time, he has work with leading firms to help them become self-sufficient at accelerating their agile transformation by leveraging a pragmatic principle-based approach.

Title: Sustaining Business Agility with the Agile Manifesto as your North Star

Abstract: Organizations want to increase their time to market for critical initiatives and believe agile is the right path to achieve those outcomes.
Professionals want to advance their skills to be hyper relevant in the competitive marketplace.
Organizations are complex systems of skilled people, processes and infrastructure that need to transform while maintaining core business functions.
This presentation will showcase a Company that used a hybrid approach and the Agile Manifesto as their North Star for decision-making to transition their 6.0B division. After the transformation, features that used to sit on the backlog for nine months are now turned around in six weeks. In addition, staff became advocates for this new way of working and accelerated their careers in the process.

- Why Scrum was not enough
- How the Agile Manifesto was used to manifest a new way of working and how it became
- “sticky” and sustained over several years.
- How an agile-hybrid mindset was used to integrate new agile ways of working into the
- existing culture.
- How this approach accelerated delivery without the risk normally associated with change.
- How the Team overcame common constraints, including a lack of a transformation budget, a
- matrix organization, and technical debt.
- Lastly, our recommendations for anyone considering a similar agile transformation.

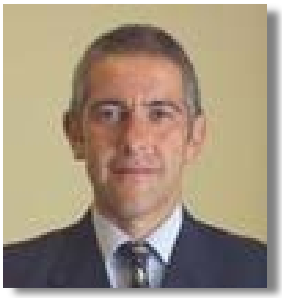
Ricardo Triana	PMI LATAM Director (May 31 Time 9:45 Eastern Time EST)

Ricardo Triana has 20 years of international experience for in the private, public and development sector implementing Program and Project Management. Recognized International Speaker on Leadership, Strategic Alignment and Project Management.

Title: How power skills are re-defining project success

Abstract: Power skills — also known as interpersonal skills or soft skills such as communication, problem-solving and collaborative leadership — are proving essential for project professionals. They are at the heart of leading successful teams, engaging stakeholders and conquering challenges to the project plan. Technical skills enable project managers to chart the path from the start of a project to close, but power skills are how they bring the entire team along for the journey to execute a common vision. On this presentation you will know more how organisations that place a higher value on power skills tend to perform significantly better on multiple key drivers of success.

Dr. Sergio Conte	Bawarp, PMI Argentina (May 31 Time 10:30 Eastern Time EST)



Sergio Luis Conte es Ph.D in Software Engineering egresado de la Universidad Cargnegie Mellon, USA.

Title Análisis de Negocio, más allá de la frontera del Proyecto

Abstract: Desde al año 1990 cuando las organizaciones entendieron que para alcanzar sus objetivos primarios de supervivencia, crecimiento y desarrollo en un mundo futuro con cambios inesperados y no planificados necesitaban ganar en agilidad se puso foco en la capacidad de generar soluciones para ese contexto y en definir el rol que pudiera liderar esa creación de soluciones. Ese rol es el Analista de negocio. Esta conferencia ayudará a entender las razones.

Dr. Ricardo Armentano	Universidad de la Republica Uruguay (May 31 Time 11:15 Eastern Time EST)

Ricardo Armentano received his Engineering degree in 1984. He obtained his PhD in Physiological Sciences (1994) from the University of Buenos Aires and from Université de Paris VII Diderot in Biomechanics – Mechanics of Biological Systems (1999). The technological developments derived from his doctoral theses have led to renowned methods of cardiovascular diagnosis which are used in Latin American countries in vascular exploration centers, as well as in the European Hospital George Pompidou in Paris where he made his second Post Doc. Currently he is Distinguished Professor of Biomedical Engineering and

Director of the Biological Engineering Department and Principal Investigator of UNPD/84/002 at Universidad de la República (Uruguay). He is also Director of the PhD program on signal processing and head of the Bioengineering R&D group (GIBIO) at Universidad Tecnológica Nacional, Buenos Aires (Argentina). He is a member of EMBS IEEE Technical Committee on Cardiopulmonary Systems and IEEE EMBS. In 2019, Ricardo Armentano was conferred the IEEE R9 Eminent Engineer Award and he served as EMBS Distinguished Lecturer. He has served as the AdCom 2015 EMBS IEEE Latin America Officer and was the Chairperson of the 32nd International Conference EMBS/IEEE Buenos Aires 2010. He has acquired international recognition in the field of cardiovascular hemodynamics and arterial hypertension. He has taught in the fields of cardiovascular dynamics and in the broad area of engineering in medicine and biology and has extensive experience in PhD supervision and examination. Ricardo Armentano has carried out professional and administrative tasks as an educator and as a scientist not only in Argentina, but also in Uruguay and other countries in the Americas and Europe. In his role as educator, he has designed, launched and managed 3 full-time degree courses in Biomedical Engineering, and in the postgraduate program, a two-year master's degree in the same field and a doctorate in signal and image processing that has been qualified with the highest categorization. For 10 years, he has served as a member of the board of directors, director of the research and development council of the Favaloro University, dean of the Faculty of Engineering, Exact and Natural Sciences and finally Executive Scientific Academic Director with the status of CEO of the University Dr. Rene Favaloro Foundation.

Title: Integrated Intelligence: Complementing Human and Artificial Intelligence for a early detection of the cardiovascular disease

Abstract: The key idea of this project is that this new approach allows assistance to the needs of individuals with cardiometabolic pathologies in their daily lives, also enabling early detection of possible situations of risks to their health. The idea that drives this project is to build a remote workstation that can face the new paradigm inherent to the advent of new technologies that is being imposed to redefine even the very concept of disease, since the so-called subclinical states, preventing diseases, delaying their appearance and improving the well-being of citizens through the adoption of personalized programs based on artificial intelligence. The proposed platform will involve the assessment of anthropometric and hemodynamic variables such as age, weight, height, blood pressure and heartrate and its use to find at least two clusters that are related to the scores that estimate cardiovascular risk based on the distribution of the factor. risk in a population. The measurement of these variables can be achieved through IoT systems, through wearables or edge-connected, and in this way upload the data to the cloud to have CV risk maps that can be characterized by artificial intelligence algorithms in groups of low or intermediate/high. In short, a system such as the one proposed that includes measurements of weight, height, blood pressure, heart rate, and PWV can be carried out in a centralized ambulatory measurement unit that is fully connected to the Internet and will enable a subclinical classification of cardiovascular disease. This project also focuses on the development of biomedical and biomechatronic technologies, which includes the development of new monitoring systems for physiological variables, the integration of this information in information backup systems with adequate cybersecurity conditions, the construction of devices for treatment of diseases that include robotic devices. The aspiration of this project is to converge in a laboratory formed by a group of internationally recognized postdoctoral professors, with relevant projects in the field of lines of research related to the prediction and prevention of cardiovascular and metabolic diseases with the development of technologies

biomedical and biomechatronics and cutting-edge technologies, especially with regard to remote and wearable sensors.

Dr. Luis Kun	LFM IEEE President of IEEE SSIT Society (May 31 Time 12:00 Eastern Time EST)

Distinguished Professor Emeritus of National Security (CHDS/NDU). Born in Montevideo, he the Merchant Marine Academy in Uruguay and holds a BSEE, MSEE, and PhD degree in BME, all from UCLA. He is an IEEE Life Fellow, a Fellow of the: American Institute for Medical and Biological Engineering, the International Academy of Medical and Biological Engineering, and the International Union for Physical and Engineering Sciences in Medicine. He is the founding Editor in Chief of Springer's Journal of Health and Technology 2010-2020. He spent 14 years at IBM and was the Director of Medical Systems Technology at Cedars Sinai Medical Center. As Senior IT Advisor to AHCPR, he formulated the IT vision and was the lead staff for High Performance Computers and Communications program and Telehealth. In July 1997, he was an invited speaker to the White House and was largely responsible for the first Telemedicine Homecare Legislation signed by President Clinton in August 1997. As a Distinguished Fellow at the CDC and an Acting Chief IT Officer for the National Immunization Program, he formulated their IT vision on 10/2000. Dr. Kun received many awards including: AIMBE's first-ever Fellow Advocate Award in 2009; IEEE-USA Citation of Honor Award with a citation, "For exemplary contributions in the inception and implementation of a health care IT vision in the US." In 2009, he was named "Professor Honoris Causa" by Favaloro University, (Argentina) and in 2013 "Distinguished Visitor" by the City of Puebla, Mexico. He served as an IEEE Distinguished Visitor for the CS and as a Distinguished Lecturer (DL) for the Engineering in Medicine and Biology Society and SSIT where he chairs the DL Program since 2016. Since 2014, he serves as an Honorary Professor of the Electrical Engineering Department at the School of Engineering of the University in Montevideo, Uruguay. He received in 2016 the Medal of Merit from Mexico's National Unit of Engineering Associations and was named Visiting Professor by the National Technological University of Buenos Aires, Argentina in 2017.

Title: Digital Age: A Holistic Approach to Achieve Citizen Safety and Security

Abstract: Disasters and Security Hazards can come in different forms. They can be caused by natural disasters, by technology or human failures and or by terrorists. To be able to have Citizen Safety and Security, requires having a holistic view of the problem through the lenses of multidisciplines and interdisciplines. This approach will enable the teams to be well prepared to face and address many different challenges but requires teamwork among individuals with very different and yet complementary backgrounds. It will also allow them to anticipate many of the challenges caused by secondary effects of these disasters. The commonality of the disasters is not only their complexity but the fact, that today in addition every activity is driven by the Internet and cyberspace, which in turn creates additional challenges to today's digital society. To be able to prevent, protect, respond, and recover from these incidents requires high levels of coordination, information sharing, and integration among many sources. Not only we need to deal with Critical Infrastructures Interdependencies but with the complexity and understanding the Interoperability needed among technology, processes, and

people. Coordinated exercises are required at very different levels including City, State, Sectors, Corporate, National, and Common Models, to assure the continuity of operations.

Dr. Wei-Jen Lee	University of Texas at Arlington, IEEE FDC Climate Change Chair, (May 31 Time 12:45 Eastern Time EST)

Professor Lee received the B.S. and M.S. degrees from National Taiwan University, Taipei, Taiwan., and the Ph.D. degree from the University of Texas, Arlington, in 1978, 1980, and 1985, respectively, all in Electrical Engineering.

Title: Climate Change

Abstract: Many factors are affecting Earth's climate, including changes in temperature, precipitation, and weather patterns, that are caused by human activities such as burning fossil fuels, deforestation, and industrial processes. These activities release greenhouse gases, such as carbon dioxide and methane, into the atmosphere, which trap heat from the sun and cause the Earth's temperature to rise. This warming has significant impacts on the environment, including rising sea levels, more frequent and severe weather events, and changes in ecosystems and biodiversity. Climate change is a global issue that requires collective action to reduce greenhouse gas emissions and adapt to the changing climate.
Technology can be used to reduce greenhouse gas emissions and mitigate the impact of climate change:
Renewable energy: The use of renewable energy sources such as solar, wind, hydropower, and geothermal can reduce greenhouse gas emissions and provide a sustainable alternative to fossil fuels.
Energy storage: The development of energy storage technology such as batteries and pumped hydro can help balance the variability of renewable energy sources and ensure a reliable supply of electricity.
Carbon capture and storage: Carbon capture and storage (CCS) technology can capture carbon dioxide emissions from power plants and industrial processes and store them underground to prevent their release into the atmosphere.
Smart grids: Smart grids can optimize the distribution and use of electricity by integrating renewable energy sources, energy storage, and demand response systems.
Electric vehicles: Electric vehicles (EVs) can reduce greenhouse gas emissions from transportation and provide a sustainable alternative to fossil fuel-powered cars.
Sustainable agriculture: Precision agriculture technology can help reduce greenhouse gas emissions from farming by optimizing fertilizer use, reducing food waste, and improving soil health.
Building efficiency: Energy-efficient buildings can reduce greenhouse gas emissions from heating and cooling by using insulation, efficient windows, and efficient heating and cooling systems.

Roxana Saint-Nom Juan Galindo (May 31 Time 13:30 Eastern Time EST)	IEEE R9 Industry engagement Committee

Juan Galindo is an Electronics Engineer and a PhD. Student in Information Systems. Works with hardware, simulation, and machine learning systems.

Dr. Roxana Saint-Nom received her Electrical Engineering degree in 1987 from ITBA (Buenos Aires Institute of Technology, a 6 years program), Argentina. She achieved an Advanced Studies degree (Suficiencia Investigadora, 2003) in Speech Processing from the "Universidad Politécnica de Madrid", Spain. Since 1988 she held academic positions in Argentina until she became tenured faculty in the rank of the Full Professor in 2004. Since 2007 she was appointed Electrical Engineering Department Chair at ITBA, until 2013.
Professor Saint-Nom changed her career path in 2013 to become Engineering Director at Eurocase, a small company that designs and manufactures technology products for Latin America. She still holds this position. In 2018, she started a new position as a part-time professor at UADE (Universidad Argentina de la Empresa), where she teaches Signal & Systems and Speech Signal Processing. Dr. Saint-Nom's research area is primarily Signal Processing, Speech, and Education as subareas. In the University she started research groups in different areas, such as speaker verification, acoustics, DSP applications and EMC (Electromagnetic Compatibility). She is the author of more than 25 papers, mostly in the area of signal processing education, published in reviewed journals or presented at international conferences such as IEEE ICASSP and IEEE ISCAS. She has been a technical reviewer for the IEEE Transactions on Circuits and Systems and IEEE ICASSP Proceedings.

Title: IEEE Future of Workforce Latin America Panel

Abstract: This roundtable will bring together industry leaders and senior government leaders to collectively explore potential technologies and long-term visions of the future workforce. We will discuss current and future-looking topics that will impact your industry/sector, such as connectivity, data security, user interfaces (UIs) / human-computer interfaces (HCIs), transformation of and geographic distribution of the workforce, new types of industries / jobs, artificial intelligence (AI), and training. Through both structured questions and unstructured dialogue, we will take these ideas and discuss how they can be applied by industry and government towards their future global workforce planning.

Dr. Cesar Viloria	Universidad del Norte, Colombia	(May 31 Time 14:15 Eastern Time EST)

Ingeniero Electrónico, Universidad del Norte (Colombia). Magíster en Ing. de Sistemas, Universidad del Norte (Colombia). PhD (c) en Economía y Gestión de la Innovación, Universidad Autónoma de Madrid (España). Profesor del Departamento de Ingeniería Eléctrica y Electrónica de la Universidad del Norte. Investigador y Consultor en temas de Transformación Digital.

Titulo: Arquitectura Empresarial de Sistemas de Información como base para la Transformación Digital

La Transformación Digital se ha convertido en un medio muy importante para las empresas conseguir sus objetivos. El conocimiento de cómo es el estado de los sistemas de información, cómo interactúan con los diferentes procesos organizacionales y cómo es la integración de datos entre ellos, se compone como un paso vital para poder trazar una estrategia de Transformación Digital alineada a la estrategia corporativa. En este sentido, la Arquitectura Empresarial de Sistemas de Información se consolida como la herramienta ideal para identificar el estado actual y el estado deseado de estos componentes de la organización.

Dr. Andrea Belz,	President Elect IEEE TEMS 2023-2024	(May 31 Time 14:45 Eastern Time EST)

Dr. Andrea Belz is Vice Dean of Transformative Initiatives at USC Viterbi and Professor of Practice in Industrial and Systems Engineering, where she specializes in engineering policy and technology strategy.
She currently serves as President-Elect of the IEEE Technology and Engineering Management (TEMS) Society. From 2019 to 2022, Andrea served as Division Director at the National Science Foundation, where she oversaw the agency's translational research activities and a $300+ M annual budget, including roughly 300 startups annually; as well as the launch of the Translational Impacts Division in the new Directorate for Technology, Innovation, and Partnerships. Under her leadership, NSF initiated many new topics in the principal translational research programs funding startups, including: Advanced Analytics, Artificial Intelligence, Augmented and Virtual Reality, Cloud and High-Performance Computing, Cybersecurity and Authentication, Human-Computer Interaction, Learning and Cognition Technologies, Mobility, and Pharmaceutical Technologies. In addition to launching these topics and overseeing the prestigious Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, she oversaw: tripling of the translational life sciences portfolio, doubling of Environmental Technologies, and reorganization of the data sciences portfolio; the creation of the new Inclusion in Innovation Initiative (I4), impacting 1,000 under-represented students by the conclusion of her term; and the reorganization of the I-Corps program.
From 2016-2019 Andrea served as the inaugural Vice Dean of Technology Innovation and Entrepreneurship at USC Viterbi, following her creation of Innovation Node - Los Angeles (IN-LA), a regional center of excellence for the NSF I-Corps program; after five years, IN-LA's region of impact ranged from Fairbanks, Alaska to San Diego on the west; and from Boulder to Tuscon in the east. Besides NSF, she has been supported by NASA, DHS, and DOD in her translation efforts and her research in

engineering policy, public-private partnerships, and associated applications of natural language processing, with recent publications in Strategic Entrepreneurship Journal, IEEE Transactions in Engineering Management, and the Journal of Technology Transfer. She has held prior faculty appointments at USC Marshall, USC Iovine/Young Academy (where she was on the founding faculty), and Caltech, where she served as Visiting Professor of Engineering. Previously she spent ten years serving as a consulting systems engineer at NASA JPL, leading roadmap efforts for the Solar System Exploration Directorate in topics ranging from life detection; electronics for extreme environments; and guidance, navigation, and control systems.

Andrea has consulted extensively to JPL, venture capital firms, and many startups and small businesses. She also served well-known organizations such as Avery Dennison, BP, Caltech, HRL (formerly Hughes Research Laboratory), the National Academies, Occidental Petroleum, and UCLA. A veteran of the Los Angeles startup scene, she was the first woman to represent the Pasadena Angels on a portfolio company board, serving as a Director of Caltech laser spinoff Ondax from 2010 until its acquisition by Coherent (NASD: COHR) in 2018. Initially she was a postdoctoral fellow in astrobiology and biogeochemistry at JPL/ Caltech. She holds a PhD in experimental nuclear physics from Caltech, a BS in physics from the University of Maryland at College Park, and an MBA in finance from the Pepperdine Graziadio School of Business.

Title: Closing remarks and IEEE TEMS Society role in the profession.