Welcome to Miami!

Thank you for joining us today for the IEEE Miami Tech Conference

We have a great line up of speakers today and we thank our sponsor and specials guests.

Mike Brisbois | 708.668.5488 | mike.brisbois@ieee.org

IEEE Miami Tech Conference

December 9, 2022, 8 am

Boca Raton Florida

Speaker times:

07:30 am Breakfast Buffet and Networking
08:00 am IEEE Announcements, Showcased Consultants, our speakers, and sponsors
08:10 am Steve Pullins, 'Energy as a Service for On-site Energy Solutions', CTO Alphastruxure
08:35 am Jim Frazer, 'An Examination of the IEEE's P2784 efforts to standardize the Smart Cities planning process'
09:00 am Chris Kaiser, 'Opportunities Challenges of Retail DC Fast Charging', VP of Business Operations, Sona Energy
09:25 am Govind Mittal, 'Storage technology – Tackling control challenges', CE+T Director
09:50 am Jim Codling, MBA PE, 'Energy Market Trends', Jacobs
10:15 am Keith D. Smith III, 'Distributed Ledger Technology's Potential Role in Smart Cities', Security Token'
10:40 am Gerry Vurciaga, 'Grid Modernization & Cybersecurity, Innovative', Executive, Siemens
11:05 am Ron Tarro, 'New World Angels and how to position your technologies for investors', CEO, Investor, Executive
11:30 am John Gentile, 'On Site Hydrogen Generation', Cascadia Technologies
11:55 am IEEE Prize Pack Give-away – Special Guest Presentation
12:00 pm Lunch Buffet, Networking
12:30 pm Lunch Keynote: Tom Maloney, Tokyo Olympic Medalist Coach, 'Mental vs. Physical to achieve Success'
12:55 pm Shaun Rogers, 'AMI Value Realization, Unlocking the Promise of AMI plus', Regional Director Trynzic
1:20 pm Jonathan Casamayor, 'Beam Forming Microware RF Communications,' Electrical Engineer
1:45 pm Matthew Willis, 'Alternative Energy Sustainability, Resiliency, Efficiency Canaveral Project', Megawatt Energy
2:10 pm Josh Robinson, 'Improving Your Maintenance Program Through Operator-Driven Reliability', IRISS Director
2:35 pm Raimundo Rodulfo, Director of Innovation and Technology / Chief Innovation Officer at City of Coral Gables
3:00 pm Michael Cogbill, 'NFPA 70 National Electric Code Changes – Digital Electricity' Principal Rev2 Consulting
3:25 pm Bob Frankston, 'Consumer Electronics', IEEE Distinguished Lecturer IEEE Consumer Technology Society
3:50 pm William Guiney, 'Solar Thermal Technology', CEO/President at Artic Solar, Inc.
4:15 pm Fabian Valle, 'MongoDB' – Solutions Architect, Falcon's Creative Group
4:40 pm Pamela Hamblin, 'Power Resiliency, Grid Stability and Utility Viability', NUEnergy Solutions, CEO
4:55 pm Tanveer Syed, STEM, Florida Institute of Technology Ph D
5:00 pm Special Guest – Entertainment – Happy Hour Networking - Salute to our speakers, Special Presentation

Register at: https://events.vtools.ieee.org/m/321482

Mike Brisbois | 708.668.5488 | mike.brisbois@ieee.org

08:10 am Steve Pullins, 'Energy as a Service for On-site Energy Solutions', CTO Alphastruxure

Commercial and industrial customers of energy (electricity, heating, and cooling) are using systems engineered 50+ years ago. The same is true for the business models used for energy…an owner model structured 50+ years ago. Today's on-site energy systems with today's controls and optimization techniques can flip the business model from that 50-year-old approach. The most long-term economic, most reliable, most resilience, and least carbon approach is no longer reliant on the grid, but on specific-built on-site microgrids with an energy as a service (EaaS) business model to match.

Steven W. Pullins

Bio

Mr. Pullins has more than 40 years of electric and gas industry experience in operations, maintenance, engineering, microgrids, and renewables project development. Mr. Pullins previously was CEO of Horizon Energy Group where he led the nation's Modern Grid Strategy for DOE and worked with more than 20 utilities in Smart Grid strategies, renewables strategies, microgrids, and power system optimization. Since 2004, he has designed more than 75 microgrids. He has advised several international utility and government organizations on Smart Grid technologies and operations, microgrid development, integrating intelligence, new power generation, and waste to energy issues. He holds a BS and MS in Engineering.

Alphastruxure develops microgrids and other distributed energy infrastructure as an energy-as-a-service (EaaS) business.

Please Welcome…

https://www.linkedin.com/in/steve-pullins-6560b92/

08:35 am Jim Frazer, 'An Examination of the IEEE's P2784 efforts to standardize the Smart Cities planning process'

What Human Factors Impact a Smart City?
What are the Nine Applications That Must Be Considered?
What Seven Technologies Drive Those Applications.
How to Identify Stakeholder Communities.
How to Document Needs of the Communities & Build a List of Consensus-Based Needs.
How to Refine Consensus-Based Needs into Measurable Functional Requirements to Develop a Request for Information (RFI) and Request for Proposal (RFP).
How to Develop and Implement Test Plans to Keep You on Track.

Jim Frazer

Bio

Vice President, Infrastructure and Smart Cities

Jim leads the Infrastructure and Smart Cities consulting team at ARC Advisory. Jim has authored many lighting, transportation, and Smart City project specifications for end users as well as national and international standards for the Institute of Electrical and Electronic Engineers (IEEE), Illuminating Engineering Society (IES), the National Electrical Manufacturers Association (NEMA) and the United States (DOT) Department of Transportation.

EDUCATION
MBA from Rider University
BS Mechanical Engineering from Rutgers University

EXPERTISE

- ✓ Industry Best Practices
- ✓ Transportation
- ✓ Lighting
- ✓ Protocols
- ✓ Interoperability
- ✓ Energy
- ✓ National and International Standards
- ✓ Technology Evaluation & Selection

Please Welcome…

https://www.linkedin.com/in/jfrazer/

09:00 am Chris Kaiser, 'Opportunities and Challenges of Retail DC Fast Charging', Sona Energy Solutions LLC

We all know about the rise in popularity and increasing adoption of Electric Vehicles. Charging Electric Vehicles primarily happens where people sleep using Level 2 (L2) charging (208/240V). But what happens if EV drivers don't have access to L2 where they sleep or if they need a charge while on a road trip? These EV drivers will need DC Fast Charging (DCFC). But providing a smooth, reliable charging experience around 150 kW per cable - while necessary for widespread EV adoption - is harder than many realize.

Chris Kaiser

Bio

Chris Kaiser is VP of Business Operations at Sona Energy Solutions. He has spent the past 15 years designing and selling Clean Energy solutions including: Energy Efficiency (primarily LED lighting and industrial air compressors), Solar Thermal and Solar PV, Energy Monitoring for Commercial/Industrial/Residential. His primary focus for the past two years is EV Charging Solutions for multi-family, retail, fleets and DCFC. Chris is a Mechanical Engineering graduate of Georgia Tech and is passionate about all things related to sustainability. He lives in Atlanta, GA with a wife and 2 young children.

Please Welcome…

https://www.linkedin.com/in/chriskaisersustainability/

09:25 am Govind Mittal, 'Storage technology – Tackling control challenges', CE+T Director

Challenges using three different storage technologies: Lithium based batteries, flywheel storage and flow batteries. Battery Technologies: which is best for scenario and how it will impact the project and ROI.

Govind Mittal

Bio

Grid Controls:

Mr. Mittal worked all around the globe with different customers and utilities, and is an owner of Grid Controller, Energy Storage and Cap bank Controller product.

Energy Storage:

Govind is the owner of a utility scale Energy Storage Controller product. He won the PRISM award at SunPower back in 2013 for developing storage controller. He continues to provide his storage expertise in product development, vendor qualification and have also successfully completed a 11 MW PV and 1 MW storage project at a US military base.

Operations & Management:

He has seven years of experience troubleshooting complex control issues at sites. He also trained Remote Operations Control Center (ROCC) and O&M Engineers in Austin Texas on a regular basis on plant controls. He has also developed smart alarming code to notify operator before a potential big failure and has also developed tools for tracking storage warranty and uptime.

Please Welcome…

https://www.linkedin.com/in/govindmittal/

09:50 am Jim Codling, MBA PE, 'Energy Market Trends', Jacobs

Jim Codling

Bio

Mr. Codling is a T&D (Transmission and Distribution) Market Leader in Energy & Power. He is a proven leader on large scale energy engineering programs and projects with government, utility, and municipal clients. A strategic professional with over 20 years energy engineering experience and a proven track record of successfully identifying, evaluating, and crafting complex solutions in design, analysis, construction management of utility scale energy systems. He is a natural leader and business development professional.

Technical areas of expertise including the following:

- Management of complex technical and logistical projects in international environments
- Construction oversight and management of large capital projects (>$500 million managed)
- Advanced power system modeling using PSS/E, ETAP and SKM
- Analysis of power system operation and control techniques and advisement
- Critical power infrastructure including low/medium voltage generator design, system simulation and commissioning
- Analysis of grid code, grid interconnection, power factor control and energy management for utility systems
- Analysis of reactive power compensation and grid interconnect
- Technical areas including low and medium voltage power transmission and distribution design and construction National Electrical Code (NFPA 70) and British Standard 7671 expertise

Please Welcome…

https://www.linkedin.com/in/jamescodlingpe/

10:15 am Keith D. Smith III, 'Distributed Ledger Technology's Potential Role in Smart Cities', Advisor - Security Token

Real-time tax assessments, hyper-localized credit systems, and smart grids are a few of the concepts that Distributed Ledger Technology (DLT) has the potential to play a role in the future of smart cities. How does DLT fit into the picture? One of the primary applications in the DLT industry is the use of the decentralized oracle network, where external data can be imported into a system in a way where all parties involved have aligned incentives to participate in enriching the overall awareness of the system. For instance, smart device users submit data regarding the mode of transportation using a uniform standard of data to autonomously receive rewards from a municipality based on the merits of decreasing carbon emissions throughout the city. Imagine the financing for a local business that improves roadways to be based on data submitted by drivers on traffic patterns and incidents recorded being autonomously committed to by a distributed system enabled by a municipality.

Keith D. Smith III

Bio

Keith serves as a strategic business consultant for companies building financial technology and distributed systems services. Keith is the Founder of Wavelink, a technology infrastructure and consulting company providing strategy and communications to small and medium-sized enterprises. Keith is also a licensed investment agent with FINRA-registered Independent Broker-Dealer, Equifinanciall, LLC.

Please Welcome…

https://www.linkedin.com/in/keithdsmith3/

10:40 am Gerry Vurciaga, 'Grid Modernization & Cybersecurity, Innovative', Executive, Siemens

Gerry Vurciaga

The presentation is on SOC (Security Operations Center) as a Service approach for Cyber Secure Substations. Information about cyber-attack vectors within a substation environment and means to address these threats will be presented. Information about a Siemens mature technology that provides Intrusion Detection System and Advanced Firewall Protection utilizing third-party partner solutions to combat cyber-attacks will be highlighted. Additionally, information how our SOCaaS (SOC as a Service) helps utilities achieve NERC CIP (critical infrastructure protection) Compliance and can reduce O&M (operational and Maintenance) costs.

Bio

As an industry veteran, Mr. Vurciaga embarked on creating his "Energy Opus." The time was ripe to leverage his knowledge, capabilities, and industry relationships to make his contributions as a citizen of this planet. He is passionate that one person can make a difference and with his friends, colleagues, and collaborators his "Energy Opus" provided sustainable solutions for Utilities, Island Communities, School Districts, Universities, Military Bases, and First Nation Communities.

Please Welcome…

https://www.linkedin.com/in/gerry-vurciaga-5baa6a1/

11:05 am Ron Tarro, 'New World Angels and how to position your technologies for investors', CEO, Investor, Executive

"Reviewing why a technologist didn't get funded: A survey of why a company got a quick "no" from New World Angels and how to position your technologies for investors. "

Ron Tarro

Bio

Ron Tarro is Florida angel investor and the President of New World Angels, a long-standing Florida angel investor syndicate. Ron is the former CEO of a telecommunications software and management services company founded in Boca Raton, Florida. He led the company from its early stages, led its expansion across nearly 40 countries, and then led its sale to a publicly held corporation where he served as a corporate vice president. Ron began his career as an IBM software engineer, project, and product manager. He subsequently spent a decade in management consulting leadership within Ernst & Young's Strategic Advisory Services organization.

Ron's passion is early-stage and growth-stage technology companies. He guides tech companies on their development of products and services, their customer and market focus, and their search for funding and growth. Ron's a long-time contributor and board member to startup incubators and university entrepreneurship programs, including FAU's Tech Runway. On the "other side of the entrepreneurial table", Ron helps private equity organizations and high net worth investors find, evaluate, and support early-stage company investments.

Please Welcome…

https://www.linkedin.com/in/rontarro/

11:30 am John Gentile, Hydrogen On-site, Cascadia Technologies

John Gentile

Bio

John A. Gentile, Managing Director, Cascadia Energy Technologies, LLC. Mr. Gentile co-founded an internet software start-up, more recently Cascadia Energy Technologies and Cascadia Green Solutions after career long application software experience in the North American energy and electric utility market. He last served as Account Executive for DNV Kema Energy & Sustainability (DNV GL). Further to the Cascadia start-up mission he is a licensed Commercial Driver (CDL) with experience in heavy truck and warehouse tractor-trailer operations. Books of interest; 'When Trucks Stop Running: Energy and the Future of Transportation' by Alice J. Friedemann.

Please Welcome…

https://www.linkedin.com/in/john-g-ba034b85/

11:55 am IEEE Prize Pack Give-away – Special Guest Presentation

Coach Tom Maloney, Olympic Medalist mentor – Tokyo Games

12:00 pm Lunch Buffet, Networking

12:00 pm FAJITA EXTRAVAGANZA
• Fire Roasted Steak, Chicken & Shrimp Over Sautéed Onions and Peppers ~Served with~ • Black Beans & Yellow Rice • Fresh Warm Tortillas ~Also Includes~ • Topping Bar: Tomato, Lettuce, Cheese

07:30 am HOT BREAKFAST BUFFET
• Scrambled Eggs • Crispy Bacon & Sausage • Belgian Waffles & Syrup • Homemade Cheesy Hash Brown Casserole • Bagel & Cream Cheese Platter • Assorted Danish • Assorted Fruit Juices - Coffee

12:30 pm Lunch Keynote: Coach Tom Maloney, Coach at 2020 Tokyo Olympics, 'Mental vs Physical for Success'

Coach Tom Maloney

Bio

Development of neurology-based techniques to enhance athletes' optimal performance. These techniques have been designed after 20 years of work with some of the world's most elite athletes. Based on the science of how the brain works, and the common problems that most athletes suffer from, I have introduced techniques that give athletes control of their body's limits to increase strength, focus, endurance, performance, and consistency.

Please Welcome…

https://www.linkedin.com/in/tom-maloney-6a85566a/

12:55 pm Shaun Rogers, 'AMI Value Realization, Unlocking the Promise of AMI plus', Regional Director Trynzic

Advanced Metering

Shaun Rogers

Bio

Regional Director - 4x Sales Leader, Tech Sales Champion-Connecting people with solutions in the energy industry with an IoT solution to help drive utilities towards a simplified process and decarbonized world!

Mr. Rogers drives results with insightful and strategic sales leadership—training top talent, building brand value, analyzing industry trends, and developing strategic relationships. As an accomplished sales executive with over 12+ years of sales experience he is highly skilled at developing teams that increase revenue and grow market share. His experience serving in a critical, hands-on, and high-impact role allows him to make a significant impact within his organizations.

Please Welcome…

https://www.linkedin.com/in/shauntyler

1:20 pm Jonathan Casamayor, 'Beam Forming Microware RF Communications,' Electrical Engineer

Jonathan Casamayor

Jonathan Casamayor will give a talk on Beamforming Microwave/RF Communications. He will highlight recent advances in these technologies. Jonathan will focus on beamforming networks and their applications, including 3D beamforming and spectrum sniffing.

Bio

Jonathan Casamayor has extensive industry experience in the aerospace sector. He worked at Lockheed Martin as an electrical engineer for the submarine-launched Trident missile system. While at Rocket Lab, he was an avionics manufacturing engineer for the Rutherford rocket engine. He is currently a PhD student researcher in Dr. Bayaner Arigong's microwave and antenna lab at Florida State University. Jonathan's research area is on microwave/RF beamforming.

Please Welcome…

https://www.linkedin.com/in/casamayor/

1:45 pm Matthew Willis, 'Alternative Energy Sustainability, Resiliency, Efficiency – Port Canaveral Project', Megawatt Energy

Matthew Willis

Bio

When critically thinking through difficult program decisions it takes strategy, cohesion, and a deep understanding of the team dynamics. Taking the hypothesis of the situation and crafting a well-articulated path forward is fundamental to project success. Being a hands-on leader and learner in the complex energy development environment has trained Matthew to perform in cross functional teams big and small. Having led sustainable construction development projects and creative solutions for multiple energy industry projects, Mr. Willis has found that learning is key to successful emotionally intelligent leadership.

Please Welcome…

https://www.linkedin.com/in/matthew-thomas-willis/

2:10 pm Josh Robinson, 'Improving Your Maintenance Program Through Operator-Driven Reliability', Business Development Director, IRISS

Implementing operators to client's reliability management systems to get better information on their tools.

Josh Robinson

Bio

Mr. Robinson is an experienced salesman with a demonstrated history of working in the mechanical or industrial engineering industry. Josh is skilled in manufacturing, root cause analysis, energy, international sales, and strategic planning. He has strong professional sales skills with a Bachelor of Business Administration (B.B.A.) focused on Marketing/Management from University of South Florida Sarasota-Manatee.

Please Welcome…

https://www.linkedin.com/in/josh-robinson-23b86256/

2:35 pm Raimundo Rodulfo, 'Coral Gables Smart Districts Cyber-Physical Infrastructure & Digital Twin Integration Platform', Director of Innovation and Technology /Chief Innovation Officer at City of Coral Gables

Raimundo Rodulfo

Coral Gables in Florida has implemented a robust and resilient smart city technology infrastructure and engineering framework throughout multiple innovation districts that provide hyper-connectivity, visibility, control, and automation of city services. This infrastructure fosters quality of life improvements in Public Safety, mobility, energy efficiency, sustainability, and accessibility of digital services, supported by a robust foundation of resilient high-speed communications/broadband --built on IEEE engineering standards and other industry frameworks and best practices for security, fault-tolerance and automated failovers during hurricanes and other disasters. This digital reality fabric includes fiber optics corridors, wireless networks, public Wi-Fi, satellite communications, a complex layer of cyber-physical systems and IoT sensors (smart lights and smart lighting controllers, CCTV, ALPR, traffic and environmental sensors, and first-of-its-kind smart city AI-powered modular integrated poles), distributed clouds, AI and machine learning-powered predictive data analytics, a smart city hub digital twin and real-time urban analytics IoT-AI public platform for citizens, first responders, traffic engineers, academic researchers, businesses, and entrepreneurs.

Bio:
Mr. Rodulfo started his career in the early 1990s as an engineer in the telecommunications industry (Bellsouth, Siemens, NCR). Worked on projects with Motorola and Lucent Technologies in Chicago and Agilent Technologies in Silicon Valley. Joined the City of Coral Gables in 2004 and currently serves as Chief Innovation Officer and Director of Innovation and Technology. Leads strategic planning, oversight and management of citywide IT operations, infrastructure, and smart city initiatives.

Under his leadership, the City has received numerous awards including first place in the Digital Cities 2018, first place in the U.S. Open Cities Index in 2019 and 2020, Smart 50 Award in Urban Infrastructure in 2020, Smart Cities Council Innovation Excellence Award in 2022, IEEE Smart Cities Awards Jury Prize in 2022, recognized as one of the eight Smart Cities to Watch in 2020 by State Tech Magazine and as one of the 12 finalists worldwide in the Gartner Eye on Innovation Awards in 2021.

Licenses/Certifications/Education: IEEE Senior Member, IISE Senior Member, Licensed Professional Engineer (P.E. EE, Florida and NCEES national record) / PMP, CSSBB, PCIP, HIPAA, Incident Management, Virtualization, SAP, ITIL / MSEM (FIU), GCES (FIU), BSEE (UNEXPO)

Please Welcome…

https://www.linkedin.com/in/raimundorodulfo/

3:00 pm Michael Cogbill, 'NFPA 70 National Electric Code Changes – Digital Electricity', Principal Rev2 Consulting

Michael Cogbill will provide highlights of the newly released code changes of the NFPA 70 2023 edition with emphasis on chapter 7 which included major changes. In addition, he will briefly discuss hot topics such as Digital Electricity (aka Class 4 circuits), Single Pair Ethernet and controlled lighting.

Michael Cogbill

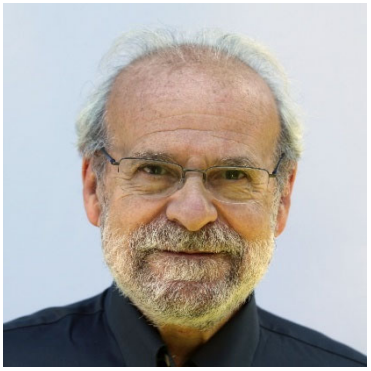
Bio

Michael Cogbill is recognized internationally as an authority in the field of home automation and integrated home systems. His professional career spans over 47 years as an engineer, manager, and entrepreneur. As an early industry pioneer going back to 1988, he was involved in several startups (including his own, InteliHome), served on international standards bodies, maintained a private consultancy for high net-worth homeowners, and been proudly involved in CEDIA since its founding. Early in his career, Michael spent 13 years in the Defense and Aerospace military complex. Today he is the principal/owner at REV2 Consulting and is sponsored by CEDIA (Custom Electronics Design and Installation Association) on NFPA 70's Code Making Panel 3. Michael has a BS in Electrical Engineering and is a Life Member of IEEE.

Please Welcome…

https://www.linkedin.com/in/michael-rev2/

3:25 pm Bob Frankston, 'Consumer Electronics', IEEE Distinguished Lecturer at IEEE Consumer Technology Society



Bob Frankston

Bio

Mr. Frankston has been working with computers since 1963. He graduated MIT with my undergraduate degrees in 1970 and continued in graduate school. He worked on the Multics projects as well as used the predecessor of the Internet beginning in 1969. Commercially he supported online services since 1966. In 1979 he went from the mainframe world to the PC industry and co-founded Software Arts with Dan Bricklin where he implemented his concept of VisiCalc. Bob was with Lotus Development from 1986 to 1990 where he created Lotus Express (and started Lotus.com though it was before the Web). At Microsoft from 1993 to 1998 Mr. Frankston championed Internet-style connectivity thus making networking accessible to individuals as "Home Networking". He is also editor of "Bits Vs. Electrons" column in the IEEE Consumer Electronics Magazine.

Mr. Frankston's interest is moving beyond the 19th century concept of telecom to community owned infrastructure. This would add hundreds of billions of dollars to the US economy and much more value to the world by creating opportunity for what we can't yet imagine.

Please Welcome…

https://www.linkedin.com/in/bobfrankston/

3:50 pm William Guiney, 'Solar Thermal Technology', President at Artic Solar, Inc.

William Guiney

Bio

William T. Guiney (Bill) has more than 40-years of experience in the solar industry as a retailer, solar contractor, distributor, manufacturer, and educator. Currently Bill is the President of Artic Solar Inc. a high temperature solar thermal collector manufacturer in Jacksonville, FL. Bill is currently the Vice Chair of the Solar Thermal Division of the American Solar Energy Society.

Previously, Bill was the Director of the Solar Heating and Cooling business at Johnson Controls. Inc., he also served as the Program Director for Global Renewable Energy Development and Program Manager for the development of the PV and Solar Thermal business at JCI. Prior to JCI, he was the General Manager of Solar Thermal at Duke Solar & Solargenix Energy. Bill also was a consultant to the Florida Solar Energy Center, at the University of Central Florida. He has an inactive Solar Contracting license in Florida and was founder of a solar distribution business with three branches in Florida. Nominated for a World Energy Award for "A guide to Fee-for-Service Solar Water Heating Programs for Caribbean Electric Utilities" business plan.

Bill has previously been the primary Solar Thermal Instructor for both the North Carolina and Florida Solar Energy Centers and provided training workshops throughout the Caribbean, and Asia. Bill also chaired the Entry Level Solar Thermal Committee for NABCEP and has been active in many states' solar organizations.

Please Welcome…

https://www.linkedin.com/in/william-guiney-581a086/

4:15 pm Fabian Valle, 'MongoDB' – Solutions Architect, Falcon's Creative Group

Fabian Valle

Bio

Solutions Architect: responsible for guiding MongoDB prospects/customers/users to design and build reliable, scalable systems using MongoDB. This includes but is not limited to software design, patterns, and operational best practices. Mr. Valle works together with his sales team to develop strategy as well as play a key role in winning deals and driving business forward with the successful implementation/deployment of MongoDB.

He has experience in the following program languages:

PSCodes: internal web application for the global Pre-Sales Organization that automates the process of requesting MongoDB ATLAS credits for POCs/POVs. Built using JIRA Automation, React, MongoDB Atlas, Realm, and Charts. -Common Services API: internal API using MongoDB Atlas, Realm, Functions, HTTPS Endpoints, and Triggers to gather information from multiple sources: Success Factors, Charthop, JIRA, etc.

mLocust: internal system that automates the provisioning of distributed load testing environments on Google Cloud Platform. Technologies used: containers, GKE, Google Cloud Run, MongoDB Realm, Python/Flask/Locust, React, gcloud

Solutions Consulting Requester (SCR): a web application that lets people request resources from certain teams. Technologies used: MongoDB Realm, React.

Solutions Consulting 360 (SC360): a system that lets leaders create/manage teams that can be leveraged by SCR. Uses a weighted-round-robin algorithm, much like load-balancing but for humans (based on availability). Also provides a complete picture (360) of the circumstances surrounding team transactions, as well as visibility into the outcomes of said transactions. Technologies used: MongoDB Realm, React

Please Welcome…

https://www.linkedin.com/in/fabian-valle-24b22b149/

4:40 pm Pamela Hamblin, 'Power Resiliency, Grid Stability & Utility Viability', NUEnergy Solutions, CEO

Pamela Hamblin

Want to build a power plant in the U.S.? Here are three things to know:
First, connecting a big source of power to the grid means getting in line. A typical project wait time has increased from around two years in 2005 to four years in 2021, according to the Lawrence Berkeley National Laboratory. Second, the interconnection queue is a crowded place. In April 2022 there were 1,400 gigawatts of projects in the queue. That's more than the U.S.'s current fleet of generation. Third, dropouts are the norm. Only 25% of projects make it to completion. Projects withdraw from the queue for a lot of reasons, but wait times are a big factor. During long waits, negotiations can fall apart, and rights can expire, reports Emma Penrod of Utility Dive. Why the bottleneck and long queues? Lack of transmission is the single biggest factor. We need way more of it to bring power from rural areas with rich wind and solar potential to power-hungry population centers. But opposition and a complex permitting process have slowed the construction of new transmission to a glacial pace. So, while congress debates permitting reform, what technologies could help us get more energy on the wires and what does this mean for the energy transition goals.

Bio

Renewable Energy Generation, Transmission & Distribution | Energy Markets, Interconnection | Integration with Integrity CEO NUEnergy

Ms. Hamblin, with over 25 years in management, business development, and operations in the Energy sector, she has a vast knowledge of the dynamics involved in delivering safe, reliable, resilient, and affordable power. Having worked with centralized legacy, as well as distributed renewable generation, Pamela has a "big picture" understanding of the challenges facing the integration towards carbon neutralization. Her expertise spans energy generation, transmission, distribution, and energy markets.

She has trusted relationships with many Corporate Level power executives and has been published in numerous industry publications. Additionally, she participates on several ASME and IEEE subject matter expert committees and events. She is also regularly invited as an expert speaker for respected industry conferences nationwide.

Please Welcome…

https://www.linkedin.com/in/pamelahamblin/

4:50 pm Tanveer Syed, 'STEM', Florida Institute of Technology, Ph D

STEM

Tanveer Syed

Bio

Tanveer Syed is a Bangladeshi citizen who was raised in Abu Dhabi UAE. He is legally blind with a rare form of Retinitis Pigmentosa. His condition leaves him with no central vision. After his schooling in the UAE, he has done his bachelor's and 1st master's degrees from the University of Leeds (UK) and the University of Bradford (UK) respectively, in the field of Biomedical Sciences. With depleted opportunities in the UK, he moved to the United States where he did his 2nd Masters from the George Washington University, getting the degree in 2015. This was in the field of Education and Human Development, with an emphasis on Science Education for middle to high school students. He started his current PhD degree of Science Education from the Florida Institute of Technology in 2016.

Tanveer's research he is pursuing a PhD in STEM Education. More specifically, he looked to investigate what improvements could be made to existing VR technology for better educational purposes for K-12 students with low vision who are trying to study science subjects. Virtual Reality has proven to be a cost-effective and equivalent substitute to the rea-life laboratory counterpart in several instances. In addition, VR has the potential to circumvent several health and safety risks, but he did not find a single study that investigates how VR can be improved for low vision learns in Science Education. Thus, he must start from the very beginning. Therefore, his current research investigates what improvements do low vision learners want to see in low immersion virtual science labs to make the simulations more usable to them. These findings have a lot of implications for the future of VR technology overall.

Please Welcome…

https://www.linkedin.com/in/john-g-ba034b85/

Mike Brisbois – Conference Director

Mike Brisbois

Bio

Mr. Brisbois is an Electrical Engineer with design experience, project management and leadership skills. He has worked in the building, space, and technology sectors. He has hosted and presented at many technical sessions and conferences. He is a technical competent leader and able to get things done. Mr. Brisbois has his Professional Engineering license in the State of Washington, Oregon, Texas, Illinois, California, and Missouri. His focus is on leading sustainable energy projects. He is a board member on several technical organizations.

https://www.linkedin.com/in/mike-brisbois-pe-2b79207/

5:00 pm Salute to our speakers Special Presentation - Special Guest – Entertainment - Happy Hour – Networking

We thank our sponsors:
Govind Mittal - CE&T
Shaun Rogers - Trynzic
Gerry Vurciaga - Siemens
Seth Leitman – Green Living Guy
Bruce Graham – HIMES Associates

We thank our supporters:
Dennis Garrett - Blue Lake Energy
Ross Pearson - Holophane Lighting

Thank You!

For joining us today for the

IEEE Miami Tech Conference

We will see you next time April 21, 2023, for the

IEEE Las Vegas Tech Conference and Expo

Mike Brisbois | 708.668.5488 | mike.brisbois@ieee.org