

**IEEE Las Vegas Tech Conference and Expo** 

# Welcome!

April 21, 2023, 8 am Las Vegas Nevada USA

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# Las Vegas Tech Conference and Expo

Speaker Line up

07:00 am Breakfast Buffet - Networking

07:30 am IEEE Announcements

08:00 am Kick off conference - Mayor

08:10 am Dr. Youcef Abdelli, Hydrogen Fueled Airplanes CTO Chief Engineer

08:35 am Moein Borghei, High Voltage Scientist with Avalanche Energy

09:00 am Sarah Aggrey Majok, CEO, Energy Industry Consultant

09:25 am Hugh J. Fuller, Principal Railway Engineer at T.Y. Lin International

9:50 am Srihari Yamanoor, Manufacturer Engineer Noah Medical

10:15 am Bobby Soltani, 'Patents for Scientists, Engineers, and Managers'

10:40 am Steve Wilson Cybercrime, Digital Investigation and Technology Consultants, ECG

11:05 am Terence Kadlec, Forensic, Expert Witness

11:30 am Nate MacIntyre, Forensic, Expert Witness

11:55 am Olympian Presentation – IEEE Prize Pack Give away

12:00 pm Lunch

12:30 pm Greg S-K Ness, Solar Energy RE Executive, 'Blockchain Web3', Attorney, Utility Token Creator

12:55 pm Pamela Hamblin, Select Power Solutions, The Grid – Transmission and Distribution

1:20 pm Adib Nasle, XENDEE CEO, Microgrid Modeling

1:45 pm Abir Chermiti, Business and Entrepreneurship

2:10 pm Daniel Lindgren, Xenotec OcuScience

2:35 pm Rachel Lindbergh, Science and Technology Consultant

3:00 pm Illia Pashkov, Metaverse Web3, Sustainability Innovations

3:25 pm Constantine Antoniou, Global Cybersecurity Select

3:50 pm Brad Luyster, Energy Storage and Strategic Outlook for Energy Markets

4:15 pm Thomas Kraft, Fire Marshal, Richland

4:40 pm Dr. Rupak Das, InstantON, Chief Technology Officer, 'Hydrogen value-stream for the society'

5:05 pm Special Presentation - Salute to the Speakers, Special Guest, Happy Hour

#### TRACK II

08:10 am Hoot Royer, Hoot Royer, PMP, CISM, ITIL, GCIP, GCIH, Information Technology, Cyber Security, Telcom

8:35 am John Going, Distributed Energy Generation Remote EV, Combined Heat and Power (CHP) Design

09:00 am Orin Laney, Atwood Research Head of Engineering

09:25 am Misty Dupre, PE Salas O'Brien Energy Conservation, ASHRAE

9:50 am Randall Volberg Type Fusion Energy, Clean Fusion Energy

10:15 am Josh Robinson, Vice President of North American Business Development at IRISS

10:40 am Peter Lilienthal, Ph D., Model Hybrid Generation projects, UL Lead

11:05 am Robyne (Kassen) Corcoran, 'ML, Robots, and Fusion: Power of Collaboration, building a Brain Bank'

11:30 am Alex Thiele, From Lab to Lumber: Sustainable Applications of Computer Vision in Robotics

11:55 am Olympian Presentation – IEEE Prize Pack Give away

12:00 pm Lunch

12:30 pm Seth Moore, Chief Operations Officer, Co-Founder & Executive Vice President at Catalyst Energy Services

12:55 am Gerry Vurciaga, Grid Modernization, Cybersecurity Siemens

1:20 pm Christel Hunter, Vice President of Standards at Cerrowire, 'Updates to the NEC 2023'

1:45 pm Saif Sayed, Senior Computer Vision Scientist at Johnson & Johnson

2:10 pm Ruben Arredondo, Distributed Energy Resources, Virtual Power Plants, National Grid, Energy Regulator

2:35 pm Jason Wright, Director, Physical Security AI

3:00 pm Gokce Ozcelik, Ph.D., Growth and Business Intelligence Lead, Sanveo, 'Explore Digital Twins'

3:25 pm Glenn Algie, AT&T IoT Engineer, 'Proposal for Distributed Entergy control at scale'

3:50 pm Behdad Kiani 'Hydrogen Fuel Stations for FCEV ZEVs Towards a Carbon Free Energy System'

4:15 pm Chad Cooper, PSP, 'Physical Security Professional', Motorola Business Development Manager A&E

4:40 pm Open

5:05 pm - Special Presentation - Salute to the Speakers, Special Guest, Happy Hour



# 08:10 am - Dr. Youcef Abdelli, Hydrogen Fueled Airplanes CTO Chief Engineer, ZeroAvia



Bio

January 19th, 2023, will go in the history - the day when ZeroAvia's team, suppliers and partners, customers and investors took the sky to demonstrate once again that the hydrogen electric aviation is a reality through this beautiful and smooth flight.

Dr. Youcef Abdelli

https://www.linkedin.com/in/dr-youcef-abdelli-37000a117/

# 8:35 pm Moein Borghei, High Voltage Scientist, Avalanche Energy, 'Fusion Energy'



**Moein Borghei** 

Fusion energy has been a long-held dream of not just scientists, but also the general public, as a clean, safe, and abundant energy source. Many academic institutions, national labs, and private companies have been and are currently working to generate more power than the amount needed to operate the device. Although progress was slow in the early 2000s, in recent years, the fusion industry has been revitalized and attracted nearly \$3 billion in investment in 2022 alone. Avalanche Energy, a VC-backed start-up, is focusing on a novel fusion configuration known as the Orbitron. The Orbitron uses a voltage difference of hundreds of kilovolts to confine the fusion fuels, while co-confining electrons using a weak magnetic field. Unlike conventional power plant-sized fusion reactors, Avalanche Energy is developing a device the size of a lunch pail that allows for rapid testing, low investment, and modularity. Its potential applications are vast, from powering electric vehicles and spacecrafts to providing electricity to remote areas around the world.

Additionally, a multi-kW power pack of this size can be used as a distributed generation unit in microgrids, eliminating the uncertainty of renewables and the emissions of fossil fuel-based generators.

#### Bio

Moein Borghei is a high voltage scientist at Avalanche Energy in Seattle, WA, USA. He earned his Ph.D. in Electrical Engineering from Virginia Tech in 2022 and his B.Sc. in Electrical Engineering from the Sharif University of Technology in 2018. Moein has published over 30 peer-reviewed articles and contributed to more than 10 conferences. His research interests include high-voltage engineering, dielectrics, charged particles simulation, multiphysics modeling, and power transmission designs. He has received several awards, including the best paper award in the 2020 IEEE Power and Energy Society General Meeting (PES-GM) and the 2021 Paul E. Torgersen Graduate Student Research Excellence Award. Additionally, he serves as the North America representative of IEEE Dielectric and Electrical Insulation Society Young Professionals and is a member of several organizations, including IEEE Task Force on Frequency Domain Studies, IEEE Dielectric and Electrical Insulation Society, IEEE Power and Energy Society, and American Institute of Aeronautics and Astronautics.

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

# 9:00 am - Sarah Aggrey Majok, CEO, Energy Industry Consultant, Interconnection standards: Impacts to both utilities and developers



Sarah Majok

Interconnection standards such as IEEE 1547 can be difficult for utilities to keep up with and interpret. With each update, utility staff need to understand what has changed and what that looks like from their perspective as a planning or operations engineer. Understanding how to update existing utility interconnection rules and regulations to ensure developers comply with IEEE 1547 and UL 1741 requires deciding whether to just reference the standards as a whole or to only incorporate parts of these standards. For the developer seeking interconnection, there is a different set of challenges to contend with. Imagine how much more challenging it is for a renewable project developer pursuing projects in different service territories. These service territories could be independent system operators in different states, or

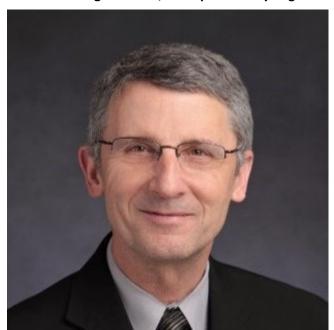
small public utilities, each with their own distinct interconnection rules. In addition to striving to meet the existing rules and regulations at each point of interconnection regardless of which service territory it is in, long-term planning in the face of changing regulations adds a layer of uncertainty. The mismatch between the pace of project development and that of interconnection rules adoptions can impact project timelines and expose projects to additional costs. For the utility, updating existing rules and regulations to incorporate interconnection standards requires diligence and resources especially if there is a dramatic increase in the number of interconnection requests. An example of one such project impacted by an update to utility interconnection rules is presented from the perspective of the developer.

#### Bio

Sarah Majok is founder of Sarah Aggrey Consulting Engineers (SACE). SACE provides expert technical advisory services to electric utilities, solar developers, and government agencies. Prior to founding SACE, Ms. Majok served as renewable energy engineering manager at Black & Veatch (B&V); principal transmission planning engineer at Sacramento Municipal Utility District (SMUD); and senior consultant at Navigant Consulting. Ms. Majok is a 25-year professional in the energy industry and holds master's and bachelor's degrees in electrical and electronic engineering with a power concentration from California State University, Sacramento.

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

#### 09:25 am - Hugh J. Fuller, Principal Railway Engineer at T.Y. Lin International



Grounding and Bonding Rail way

Hugh J. Fuller, PE

# Bio

Hugh J. Fuller, P.E., a railway engineer, and project manager with more than 30 years of experience, has managed or designed numerous light rail, streetcar, commuter rail, freight rail and high-speed rail projects. A life-long "railroader," Fuller's impressive project history includes designing the world's first and only joint railway and automobile tunnel (Whittier, AK), operating streetcars for the McKinney Avenue Transit Authority (Dallas, TX) and managing the design of the San Onofre (CA) to Pulgas Second Main Track on the LOSSAN Corridor.

Fuller was recently appointed as Chair of the Transportation Research Board's (TRB) Standing Committee AR060 Rail Transit Infrastructure Design and Maintenance. This committee is charged with developing research topics in the railway engineering discipline and seeking funding to fully investigate these topics. As a 25-year member and supporter of Women's Transportation Seminar International (WTS), Fuller identified the lack of diversity and representation within the committee's board and member-level. Fuller's first achievement as Chair was to introduce and encourage more women engineers to participate within the committee's previously all-male Members-level, in less than a year. Today the Committee's Member-level is more than 60% women.

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

# 9:50 am - Srihari Yamanoor, Al, and Autonomy on the Factory Floor



**Srihari Yamanoor** 

Artificial Intelligence (AI) is making leaps and bounds in various industrial applications. Alongside the decades long efforts at accomplishing factory autonomy, Machine Learning (ML) and Deep Learning (DL) are starting to have a direct impact on all aspects of factory work, ranging from floor design to manufacturing, preventive maintenance, quality control, and beyond. While robots will execute production and related tasks, AI will assist in managing, monitoring, and planning associated tasks and activities. Automated factories have the capability to assist humans on the floor, turbocharging productivity while reducing human error, fatigue, and injury. While factories will become increasingly automated, they will not displace skilled humans in many areas for a long time. Expectations that robotics and AI can rapidly displace human labor

are born out of proportion. Production personnel and other stakeholders will have to learn how to use AI to supplement and complement their work in factories.

#### Bio

Srihari Yamanoor has over 13 years of experience in the medical device industry. He has worked on New Product Development and Introduction, reliability improvements, manufacturing, and quality. His areas of work include Diabetes, Women's Health, Dermatology, Cardiology, Robotic and Conventional Surgery, Orthopedics, and Oncology. His interests in the future of the industry range from medical device innovation paradigms to the impact of IoT to Artificial Intelligence and Personalized Medicine on Prevention and the Delivery of Healthcare. Srihari is also the co-author of 3 books in the DIY electronics and hardware space. In 2021, Srihari was named one of the Top 100 Healthcare Visionaries by IFAH. In 2020, Srihari participated in the US Robotics Roadmap refresh, focusing on robotics in healthcare diagnostics and surgery.

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

#### 10:15 am – Bobby Soltani, 'Patents for Scientists, Engineers, and Managers'



Welcome to "Patents for Scientists, Engineers, and Managers"

An introductory primer on patent law and practice specifically designed for professionals involved in business and technology. During this presentation, you'll gain a comprehensive overview of patent protection and trade secret protection and learn the essential fundamentals of identifying and documenting an invention, as well as how to apply for a patent. We'll cover the different types of patent applications and patentability requirements, as well as the crucial components of a patent application and the prosecution process for obtaining a patent before the U.S. Patent and Trademark Office (USPTO). By attending this presentation, you'll leave with a better understanding of patent law and how it applies to

your role, empowering you to make informed decisions that can help protect your company's valuable intellectual property.

#### Bio:

Bobby is a patent attorney at Seed Intellectual Property Law Group and focuses his practice on patent prosecution of electrical engineering and computer software matters as well as patent litigation, infringement opinions, licensing, and strategic portfolio management. He received a B.S. in Electrical Engineering from the University of Oklahoma, an M.S. in Electrical Engineering from Oklahoma State University, and a Juris Doctorate from the University of Oklahoma College of Law. Bobby has extensive experience preparing and prosecuting domestic and international patent applications in various technologies relating to machine learning, artificial intelligence (AI), virtual reality (VR), robotics, autonomous vehicles, optics, consumer electronics, medical devices, and software applications. His practice also includes litigating patent infringement matters, drafting opinions, licensing, and patent portfolio analysis. Before practicing law, Bobby was an electrical engineer at Seagate Technology and the Federal Aviation Administration.

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

## 10:40 am - Steve Wilson, The Smart Campus Initiative and Future-Proofing Education, BCIT



Daily Digital Touchpoints for a Smart Campus Future-proofing education. What does the smart, digitally connected campus of the future look like? The Smart Campus Initiative at the British Columbia Institute of Technology – BCIT is seeking answers to this question. A team of experts from across technology and education have come together to review the latest digital innovations and determine how these can be applied to create a 'smart campus' at BCIT. This project is supported by the Centre for Digital Transformation – C4DT and is currently in the initial 'strategy development' phase. This presentation will discuss daily digital touchpoints, lessons learned over the past year and provide insights into the road ahead as we continue the journey of achieving this ambitious transformation.

**Steve Wilson** 

#### Bio

Currently lead for the BCIT Centre for Digital Transformation / Smart Campus Initiative — C4DT Taking technology transformations to new heights. Steve currently works in the information and communication technology ecosystem providing strategic solutions to his clients. Steve sees patterns where others see noise, whether it's cyber/digital forensics, big data analytics challenges, risk management, digital transformation, or strategic innovation and change leadership. Combined with a number of professional and academic certifications; Steve epitomizes industry best practices within the field of information and communication technology, providing strategic insights for successful outcomes. Some of his past clients come from a variety of industries including financial services, law enforcement, oil and gas, retail, legal services, government, transportation, education and non-profit.

https://www.linkedin.com/in/swilson8/

#### 11:05 am - Terence Kadlec, Forensic, Expert Witness



#### Bio

Terence serves as Vice President; Engineering & Specialty Services at MC Consultants where leads the team's effort in delivering high quality consulting services specific to the growing demands related to a wide range of engineering disciplines. Based in Denver, Colorado, he serves the Rocky Mountain Region as a practicing civil and structural forensic expert, specific to construction defect and general liability claims. Mr. Kadlec additionally leads MC's specialty services which include a wide range of offerings from aerial drone investigations to artificial intelligence, specific to analyzing large volumes of forensic consulting project's data. As a licensed Professional Engineer in 18 states and credentialed by NCEES as a Model Law Engineer, Mr. Kadlec has provided expert witness testimony through sworn affidavits, deposition, and trial as a practicing forensic engineer and expert

witness. Mr. Kadlec's engineering experience includes performing civil and structural engineer design on residential, commercial, marine, and industrial projects; while his forensic expertise includes investigations following fires, explosions, vehicular impacts, weather/catastrophe events, structural failures, civil/earthwork failures, and construction deficiencies. Mr. Kadlec's experience with construction and design defects include evaluations in civil and structural engineering matters. Mr. Kadlec regularly collaborates with industry professionals and is a frequent presenter at industry seminars across the United States and published author on the topics of forensic engineering, expert witness testimony, and construction defect claims.

https://www.linkedin.com/in/terence-d-kadlec-p-e-02b08b7/

#### 11:30 am – Nate Macintyre, Regional Director MC Consultants, Forensics



**Nate MacIntyre** 

#### Bio

Nate MacIntyre is with MC Consultants and a regional director pacific northwest and Hawaii. Technical responsibilities include building envelope assessment, rehabilitation, and restoration. Mr. MacIntyre is a licensed contractor in Oregon, Washington, Idaho, and Alaska. Specific areas of expertise include design review, building envelope condition assessments, building component field testing and analysis, forensic investigation of building envelope failures, trade coordination, and project management. Mr. MacIntyre has spoken to various trade associations on a range of topics, including the risks of "green" design and construction, building envelope design, and waterproofing failure analysis. Mr. MacIntyre has been involved in the construction industry for over 20 years, focusing on building science and building envelope issues. He began his building science career as a test and balance engineering technician with Northwest Engineering Services. He then took the role of Director of Technical Services and owner of Superior Air Quality. At both firms, Nate was responsible for air quality testing, systems repair, and calibration. He later

transitioned to Project Manager, for firms specializing in building science, waterproofing, and forensic investigation. In this role, Nate inspected, consulted, and reported on construction defects for residential and commercial buildings. Additionally, he provided on-site project management and quality control, and acted as a liaison/advisor for project building owners, architects, subcontractors, project engineers, and building officials. Specialties: Building envelope failure evaluation/analysis, building envelope condition assessment, building envelope design, construction defect evaluation and construction management.

https://www.linkedin.com/in/nate-macintyre-a9ab52b/

11:55 am Special Guest – IEEE Prize Pack Give way

12:00 pm Lunch

# 12:30 pm - Greg S-K Ness, Solar Energy RE Executive, 'Blockchain Web3', Attorney, Utility Token Creator



**Greg S-K Ness** 

Mr. Greg S-K Ness is a principal and serve as General Counsel at Southern Current, a US nationwide developer of utility scale solar and battery storage projects. We've sold over 900 MW of solar capacity, including over 97 projects in the last 4+ years. We currently have an active portfolio of approximately 10,100 MWs along with 4,850 earlystage assets. Southern Current is majority owned by energyRe, LLC, a leading independent clean energy company, energyRe's founding investors include principals of Related Companies, one of the nation's most prominent privately-owned real estate firms and one of the country's largest creators and preservationists of affordable housing. energyRe through its partnership between The New York Power Authority (NYPA) and Invenergy is behind the Clean Path New York Project. This \$11 billion infrastructure project will enable the delivery of more than 7.5 million megawatt-hours of emissions-free energy into New York City every year. Prior to Southern Current, I served as Deputy General Counsel and Principal at FLS Energy (now Cypress

Creek Renewables, LLC). During my active tenure at FLS, I helped transition the company from a solar thermal and residential installer/asset owner and was instrumental in growing FLS from \$2 million to over \$300 million in annual revenue and facilitated approximately \$1 billion in project and corporate finance. My key role was leading the company's green field development efforts as well as leading the efforts related to the acquisition of over 15 asset portfolios comprising hundreds of megawatts of capacity.

Commercial Real Estate experience involves advising Fortune 400 companies, lenders, REITs, and Big Box retail in multiple aspects of the development process, from environmental compliance to zoning.

Web3/Polygon/Cardano/Ocean Protocol/IoTeX/Hedera (@SolarCatzShelley)

Renewable Energy Development

Solar Project Development

Blockchain Technology/Data

NFT Creation

DAO governance

Environmental Due Diligence

Metaverse Development; Sandbox, Pavia and Decentraland

Burning Man (Five times, camp placement coordinator/entrepreneur wrangler)

Commercial Real Estate Development

Metaverse Real Estate Development (Metaverse Solar - Metaverse Renewables)

Cannabis Regulation

Purchases, Lease and Easements

Land Use Law

Zoning

Third Generation Cryptocurrency ("alts")

Sustainability

Bar Admissions: District of Columbia (Active); Georgia (Inactive); U.S. Patent and Trademark Office

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

# 12:55 am Pamela Hamblin, Select Power Systems, Distribution and Transmission Systems



Pamela Hamblin

creating opportunities for succession talent.

## Areas of Expertise

- Strategic Sales Planning
- Budgeting & Forecasting
- Staff Development & Leadership
- Process Improvement
- Stakeholder Management
- Account Management
- Revenue/Profit Optimization
- Relationship Building
- New Business Development

# **Key Accomplishments**

- Prepared and published papers for ASME on both boiler reliability and high-energy piping.
- Published feature articles in power engineering magazines and inspection journals.
- Participated at Electric Power Conference, Power-Gen, and 23rd Annual IPEIA Conferences.
- Developed and maintained 9K+ resource contacts within utility and industrial sectors.

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

Business-savvy and performance-driven professional with substantial experience developing and executing effective sales and marketing strategies to meet/exceed business needs and goals. Proven success in ensuring flawless execution of sales strategy to build growing, sustainable, and profitable business. Proficient in designing and implementing optimal go-to-market model based on dynamics and business strategy, including sales roles, coverage models, and team configurations to maximize productivity. Well-versed in monitoring customer, market, and competitor activity, providing feedback and recommendations to business, company, and relevant functional leadership teams. Instrumental at fostering and maintaining business relationships with key internal and external stakeholders as well as collaborating with cross-functional teams on upstream and downstream marketing goals. Expert at coaching, mentoring, and raising team's ability to deliver and exceed expectations while

# 1:20 pm – Adib Naslé, XENDEE CEO, Microgrid Software



Microgrid Software the design and operation of EV infrastructure and net-zero distributed energy system

**Bio** CEO XENDEE.

Adib Naslé

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

# 1:45 pm - Abir Chermiti, Business and Entrepreneurship, Woman CEO, Elle Media



**Abir Chermiti** 

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

#### Bio

Abir Chermiti is a Certified Harvard Business Strategist, Entrepreneurship & Business Coach, and an Award-winning Women in Tech Ally. A Software Engineer who had a large experience working with international workplaces and organizations who decided to turn her passion into a business & started Elle Media Empire; a Media and Business Consulting firm where she helps business from startup to scale. Abir is a huge supporter of women in tech and a true believer that women can do more if they are given the space to build and create. She started her own business in the middle of a global pandemic and launched EllePod, a podcast series that features stories of women in tech and business to support women and young individuals in their career path and empower them to embrace their digital and entrepreneurial Potential.

# 2:10 pm – Daniel Lindgren, Xenotec OcuScience, Challenging the Body: Turning Your Smartphone into a Data Capturing Medical Device



Fitness monitors and smartwatches connected to your phone are everywhere these days, and Big Data is turning this constant stream of personal data into something beneficial and monetizable. Evoq Technologies is expanding the ability of everyone's smartphone to be a medical screening device with our capabilities that go beyond current wearable technology. We are taking devices out of the clinic and into home healthcare; starting with visual electrophysiology to detect retinal diseases that cause blindness. Our patented technology uses basic smartphone capabilities to precisely stimulate the body and quantifiably measure its evoked response. This precise and repeatable data is stored and analyzed in a cloud-based platform,

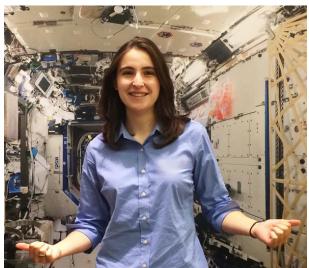
**Daniel Lindgren** 

ready for artificial intelligence. Daniel's presentation will discuss the development process to turn an ordinary smartphone into a powerful medical device.

#### Bio

Daniel Lindgren is the president of OcuScience®, an ophthalmic device developer and manufacturer. He holds a bachelor's degree in Economics from Missouri University of Science & Technology, a master's in international business from the Boeing Institute, Saint Louis University, and graduate studies in Pharmaceutical Science at the University of Missouri – Kansas City. Mr. Lindgren also completed the Kauffman Entrepreneurial Internship Program. He has extensive experience in a variety of industries including software development, medical device development, manufacturing, management consulting, and pharmaceutical science. Daniel is credited with the development several research innovations and medical devices; including being first investigator to revive human donor retina hours after death. He is supports Lions International and is a veteran US Army Military Police Officer. Daniel has three children and lives in Henderson, Nevada.

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



Rachel Lindbergh

There are many pressing challenges facing the space ecosystem—across civil, commercial, and defense stakeholders—that have the potential to adversely affect our collective ability to operate in space in a sustainable, economically viable way. More than ever, interdisciplinary, rigorous, and objective science policy research is needed to support decision-makers as they address these challenges. Rachel will discuss these challenges in her presentation, highlighting some of the Science and Technology Policy Institute's contributions in space policy.

## Bio

Rachel Lindbergh is a space policy analyst for the IDA Science and Technology Policy Institute (STPI), a federally funded research and development center created by Congress to support the White House Office of Science and Technology Policy. Rachel graduated from the University of Chicago in 2019 with a degree in Public Policy and Russian & Eastern European Studies. As a high school student, Rachel started her journey in space by sending an experiment to the International Space Station (ISS). Through the Student Spaceflight Experiments Program (SSEP), Rachel and her team investigated tin whiskers in lead-free solder, learning about the ups and downs of research in space firsthand when her first two attempts at transporting her payloads to the ISS were destroyed with the explosions of the Cygnus Orb-3 and SpaceX's CRS-7 rockets in 2014 and 2015 respectively. After becoming a member of an exclusive club no one wants to be in—those who have seen their life's work blow up on a rocket — twice—Rachel's experiment (finally) reached the ISS on the SpaceX-8. Rachel gave a TEDx on this experience in 2022 (https://www.youtube.com/watch?v=4s-tshDZvoA). Rachel continued her journey into space exploration at the University of Chicago, where she discovered the importance of space policy and wrote a distinguished thesis on the ISS National Laboratory's role in Low Earth Orbit (LEO) Commercialization. After graduating with degrees in Public Policy and Russian, Rachel now uses her experience as both a scientist and a policy researcher to support American efforts in exploring the Final Frontier.

https://www.linkedin.com/in/rachel-lindbergh-b361287a/

**3:00 pm - Illia Pashkov, Metaverse Web3, Sustainability Innovations, '**Metaverse Digital Reality related to business'



Illia Pashkov

#### Bio

A futurist-producer and award-winning art/creative director with a big passion for design, innovation, sustainability, and strategy. Over 15 years of experience in successful work with enterprise companies, startups, and emerging technologies. Specialties: Innovative Technologies, Branding & Identity, Startups & New Business Development, Art & Creative Direction, Product Design & Development, User Interface & User Experience, Blockchain & Crypto, Metaverse, AR/XR, NFT. Public & keynote speaker at international conferences, including Global Economy Forum in San Francisco, Consensus in New York, CoinAgenda in Las Vegas, World Blockchain Forum in Dubai & Miami, iBlockchain Summit in Shenzhen & Guangzhou, Satoshi United in Dubai, Blockchain Practitioner Conference in Shanghai, and others. Co-Founder of Altar, Player's Health, WISE, WEEDAR, #WithUkraine. Mentor @ Hustle Summit in New York and Chicago. Industries: Impact & Sustainability, Web3 & Metaverse, Gaming

& Play2Earn, Automotive, AI & Machine Learning, Analytics & Data, E-commerce & Fashion, Fintech & Blockchain, Hardware & Electronics, FinTech & InsureTech, Music & Entertainment, Sport & Healthcare, Travel & Geolocation.

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

# 3:25 pm – Constantine Antoniou, 'Practical Strategies to Protect Your Company from Cybersecurity and Ransomware Attacks', Global Cybersecurity Select



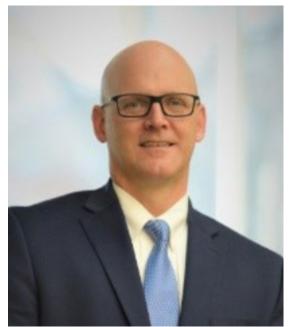
**Constantine Antoniou** 

Industry and critical infrastructure play a significant role in the supply chain of millions of products and the safety of our citizens. However, with the increasing reliance on digital systems to manage operations and data, we are facing a significant threat from ransomware attacks. By attending this presentation, participants will gain a better understanding of the risks associated with ransomware attacks and learn practical strategies for protecting their organizations and assets. They will also gain insights into emerging trends in cybersecurity and learn how they can leverage new technologies to enhance their cybersecurity posture.

Constantine Antoniou is a seasoned engineering executive who spent the first decade of his career designing complex industrial systems before spending the next decade designing and executing countless large-scale OT and IT client projects globally. His current focus is helping companies and government agencies to develop and execute best-in-class enterprise-wide cybersecurity strategies.

https://www.linkedin.com/in/c-antoniou/

## 3:50 pm - Brad Luyster, Energy Storage Microgrids - Market Trends and Strategies, Vertiv



Mission critical applications and the challenges we face when using energy storage. Chemistry information regarding Battery Energy Storage.

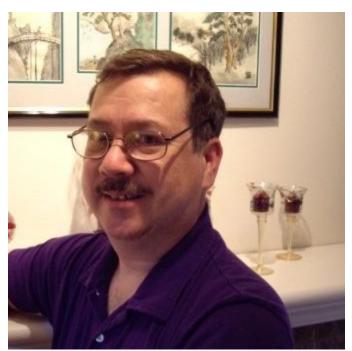
**Brad Luyster** 

#### Bio

Brad has spent his entire career in the Energy Industry working for and leading businesses at Fortune 100 companies such as, Siemens, ABB, and Honeywell. In the past 12 years he has been involved in leading businesses and product systems development programs, in Smart Grid and Microgrids, for Siemens, ABB, and Vertiv. These roles have allowed Brad to gain experience and practical applications using Hybrid Energy systems, coupled to Smart Power distribution networks which provide highly resilient, sustainable, and reliable microgrids to remote communities and C&I end-users. Brad has been married for over 30 years, has three daughters, two grandchildren, and an MBA from Ashland University.

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

#### 4:15 pm Thomas Kraft, Fire Marshal, Richland Washington, Updates NFPA 13 Fire Sprinkler Code



#### **Thomas Kraft**

#### Bio

Over 30 years of experience in fire protection and safety within private industry, risk management. Involved in day-to-day safety support to complex chemical operations in petroleum, utility, Hydroelectric, and DOE plants, as well as oversight for insurers and various federal, state, and local government agencies. Works closely with construction and process industry organizations in providing comprehensive fire safety programs. Works directly for fire departments and with building safety divisions. Has a broad base of experience in industry from previous work through risk and insurance management, including process safety consulting and direct field support for a variety of transportation and shipping industry, utility stations, electronics, and aerospace settings, and machine manufacturers, health care, property management, hazardous waste treatment and processing, financial, data processing.

Developed and managed Industrial Safety Programs, provided benchmark assessments, delivered training to both supervisory and line staff, and routinely conducts accident/incident investigations. Involved with both detailed root cause analysis and strategic planning oriented toward integrated safety management. Conducts construction design review, field safety oversight, and safety program development for individual contractors. Developed tools for multidiscipline approach safety analysis of complex and high hazard equipment and process operations Provides management direction and guidance to other technical risk personnel and major accounts. Authored "Perspectives in Loss Control for Electric Power Generating Facilities, The Fire Protection Engineering Practice Manual, Model Best Practices Process Plant Safety Manual, and Model Best Practices in Safety for Construction Contractors at Process and Utility Plants.

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

4:40 pm – Dr. Rupak Das, Energy Consultant - Alternative & Renewable Energy - Hydrogen Economy, Fuel Cells (PEMFC & SOFC), Solar PV, Carbon Capture, Micro Grid. Power, Energy and Utility Sector, 'Hydrogen valuestream for the society'



Hydrogen, the drive of energy transition: Today, hydrogen is considered the most important raw material and energy carrier for a climate-neutral industry, and the global reduction of greenhouse gas emissions. The hydrogen economy is heavily debated by both, proponents, and critics. Hydrogen can become a viable storage medium for surplus renewable energy. Electricity generated from wind and solar, which cannot be used immediately in a productive way, would not be lost but can be utilized during the production of hydrogen. It can be stored and retrieved or transported as needed later. Another potential lies in the direct production of hydrogen with renewable energies. Hydrogen thus increases flexibility in the energy system and further reduces dependence on conventional, base-load power plants. A

Dr. Rupak Das

fuel cell car uses hydrogen as fuel for its electric drive – the technology is also known as hydrogen mobility. No emissions are produced during energy generation, and only water vapor is emitted as exhaust gas. The number of hydrogen cars from major automotive companies is still manageable today. The development of a widespread hydrogen infrastructure for mobility is one of the greatest challenges for the widespread use and establishment of hydrogen mobility. The state of the current infrastructure makes it clear that hydrogen mobility is still in the development stage. For hydrogen to play a key role in the environmentally friendly energy mix and the decarbonization of the economy of the future, substantial investments must be made in supply capacity and security. This includes, among other things, a rapid expansion of infrastructure, renewable energies, and the massive development of electrolysis capacities to be able to compete with fossil fuels in terms of cost. In addition, improvements are needed in the transport and storage of hydrogen to minimize energy losses in the long term.

#### Bio

Dr. Das has double Master's in Chemical Engg. and Materials Science and a PhD in Metallurgical Engineering. He has worked continuously on advancing and incubating clean energy technologies with a focus on fuel cells. His doctoral thesis was focused on developing a new compositional anode of the Solid Oxide Fuel Cell (SOFC). Polymer Electrolyte Membrane Fuel Cell (PEMFC) was one of his competitive edges in his master's with emphasis on Hydrogen fuel. He has 25 + years of experience in hands-on, proactive leadership in Renewable and Alternative Energy resources especially in Fuel Cells (PEMFC, SOFC, DMFC & MCFC), Solar PV Energy, Hydrogen Economy (Production, Storage, Dispensing), Electrolyzer, Micro Grids, Battery Energy Storage System (BESS), Carbon Capture / Sequestration, Metallurgical analysis and Power, Energy & Utility Sector. He has been with OJI CALIFCO since June 2014 acting as Sr. VP Engineering Operations at this moment. He helps clients in the utilities, alternative energy, hydrogen economy, hydrogen infrastructure, fuel cells, power, micro grid, petroleum, carbon capture / sequestration, and oil & gas sector. He acts as the CTO of Instant On, a utility scale service provider in Southern California since June 2021. Instant On also addresses the "Energy as a service" sector for powering almost any commercial, residential, or remote localities with the Microgrid structures. Recently, the company has been highlighted in the "Fortune India Exchange" prestigious magazine. Moreover, he has been a founding member and CTO of Sailors Energy since its inception from February 2019. He is the expert consultant and Subject Matter Expert (SME) in Alternative, Renewable and Conventional Energy specializing in Fuel Cell (SOFC, PEMFC & MCFC), Hydrogen Economy, Electrolyzer, Microgrid, Specialized Turbine Coatings (EBC & TBC), Ceramic Matrix Composite (CMC), Graphene and Chemicals. He has led multimillion-dollar programs, developed partnerships with renowned universities and technology developers, applied for funding for research with various organizations, developed call for proposals for funding programs, selected winning proposals, developed, and recruited diverse team members, and developed budgets and schedules with detailed planning on specific goals and objectives. He has led multiple cross functional and cross organizational teams located locally and remotely at GE. He has led teams with the backgrounds in mechanical, electrical, electrochemical, computer science, chemical engineers, chemists, material scientists. He is a seasoned executive with regular updates to C-suite including presentations to noble laureates. He has been with J.S. Held LLC from August 2018 – to February 2019 as the Asst. Vice President (Ind. Contractor & Consultant) and a member of the Construction Advisory Board addressing more than \$64M and saving \$16M from allocated budget. He has completed the Wharton Business Foundation Capstone Course from University of Pennsylvania in 2016. He completed his Ph.D. in Metallurgical & Materials Engineering from The University of Alabama in 2013 specializing in solid oxide fuel cell (SOFC). Rupak has a Master of Science in Materials Science & Engineering from Georgia Institute of Technology (2006) and a Master of Science in Chemical Engineering from The University of Alabama in Huntsville (2000). Rupak did his Bachelor of Science in Chemical Engineering from Jadavpur University, Calcutta, India. He authored 34 Patent applications granted and pending, 16 Journal Publications until date and has been selected in Marquis' Who's Who of America, 2018. He is a regular volunteer of North America Shirdi Sai Temple of Atlanta (NASSTA), Shri Shirdi Sai Baba Sansthan LA (Shirdi Sai LA), Homeless Feeding for Vedanta International Cultural Center (VICC) and Bengali Association of Southern California (BASC). He was the president, Rotary Club of Arcadia, CA - Red Badger's Group (8 / 2017 – 2018).

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

# 8:10 am - Hoot Royer, Hoot Royer, PMP, CISM, ITIL, GCIP, GCIH, Information Technology, Cyber Security, Telecommunications



**Hoot Royer** 

#### Bio

Hoot Royer is a results-driven technology professional with experience and involvement in industrial/commercial IT and telecommunications systems and infrastructure. Demonstrated expertise in ensuring the integrity and optimal operation of mission-critical, enterprise-level IT/telecom systems and equipment that support strategic business objectives. Innovative collaborator who is solutions-oriented and empowers team players, cultivating strong relationships to maintain operational efficiency and keep strategic business initiatives moving forward.

https://www.linkedin.com/in/hoot-royer/

# 8:35 am John Going, Distributed Energy Generation Remote EV, Combined Heat and Power (CHP) Design



Combined Heat and Power Design Considerations

Jon Going

#### Bio

Jon is a mechanical engineer out of Milwaukee School of Engineering. He has over 27 years in power generation experience, including demand response and microgrids. CHP experience includes ORC technologies, absorption chillers, steam, and hot water systems. His engineering background has made him an integral team member in all facets of project completion, not just the front-end sale. Experienced in developing energy projects from concept through commissioning in various markets including agriculture, food and beverage, hospitals, microgrids, and data centers, among others.

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

# 9:00 am Orin Laney, Atwood Research Head of Engineering, 'Why I'm glad I finally got a PE license'



Orin Laney, PE

The profession of engineering shares important characteristics with other professions such as law and medicine. One of these is a statutory requirement for licensure to legally perform work with health, safety, or financial consequences. In some branches of engineering, such as civil engineering, it is a routine job requirement. In certain other branches, such as electrical engineering, it is relatively rare. Nevertheless, licensure is a statutory requirement unless the engineering work is performed under one of several exemptions. Consultants in particular encounter work where licensure is indicated, for instance with medical devices, high voltage electrical power, hazardous machinery, toxic chemicals, or biohazardous materials. Licensure can reassure potential clients of your expertise and is an important credential for expert witness work. In short, even if you might not need a license most of the time, when it is important it is important. As his PE title indicates, our speaker, Orin Laney, is a Licensed Professional Engineer. In this talk, he will describe the definition and history of engineering, the historical and

legal basis for licensure, how a license is obtained, the role in protecting the public, and possible consequences of unlicensed work.

#### Bio

Orin Laney is a consultant specializing in mixed signal and analog design, RF instrumentation, design for EMC compliance, and signal integrity. He has held a PE license since 2004 and is also certified by the National Association of Radio and Telecommunications Engineers as an EMC engineer. He has a BSEE from the University of Maryland, an MSEE from San Jose State University, and an MBA from Brigham Young University.

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

# 9:25 am Misty Dupre, PE Principal, Salas O'Brien, Energy Efficiency



Energy efficiency is on the forefront of today's design practices. With an increased emphasis on carbon neutrality, electrification and more ecologically friendly approach, attention must be paid to the amount of energy buildings use on a daily basis. This presentation will focus on the industry standard, ASHRAE's recommended approach to evaluating existing buildings in pursuit of improved energy performance and some key elements that can be considered when evaluating energy efficiency measures to implement. Being a mechanical engineer and the fact that a majority of energy consuming elements within a building are located within the heating, ventilating and air conditioning systems, the application of improved energy measures will be highlighted within these systems.

Misty DuPré, PE

#### Bio

Misty DuPré is a Principal and senior mechanical engineer with Salas O'Brien. A graduate from the University of Wyoming with an Architectural Engineering Degree and registered professional mechanical engineer in California, she has been working in the industry for the past 23 years in the San Diego area. Her design experience encompasses central plant systems, Variable Refrigerant Flow (VRF), traditional DX systems, DDC control systems and industrial ventilation within various project types. A major focus of her design work has been within the federal government and military facilities, particularly NAVFAC projects, however her experience encompasses a wide range of markets including K-12, multi-family residential, healthcare, commercial, food service and hospitality. She is involved as LEED administrator for projects pursing LEED certification. Currently she leads a group of talented mechanical and plumbing professionals and as a mentor takes pride in their growth and accomplishments.

https://www.linkedin.com/in/misty-dupre-pe-b3202211/

# 9:50 am Randall Volberg Type Fusion Energy, VP Business Development, Founder, Director at Type One Energy



Clean Fusion Energy.

**Randall Volberg** 

#### Bio

Mr. Volberg is fortunate to work with the brightest minds in stellarator physics and engineering to bring this remarkable fusion power system to commercialization through innovations in high temperature superconducting magnets and advanced manufacturing. I operate in the Venn overlap of the fusion energy ecosystem comprised of R&D labs, government agencies, private and public finance, and strategic industry stakeholders. Randall's technical focus is on the application of advanced manufacturing and materials to 3D-print major stellarator components optimized by generative design.

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

# 10:15 am Josh Robinson, Vice President of North American Business Development at IRISS



**Josh Robinson** 

# Bio

Experienced Salesman with a demonstrated history of working in the mechanical or industrial engineering industry. Skilled in Manufacturing, Root Cause Analysis, Energy, International Sales, and Strategic Planning. Strong sales professional with a Bachelor of Business Administration (B.B.A.) focused in Marketing/Management from University of South Florida Sarasota-Manatee.

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Peter Lilienthal, Ph.D.

How to model hybrid generation projects (both front-of-the-meter and behind-the-meter) including renewable energy and microgrids. It is based on over 30 years of experience with modeling these types of projects, both at NREL and in the private sector. It will include a discussion of how the technology and economics of these projects has evolved over those 30 years.

# Bio

Dr. Peter Lilienthal is Global Microgrid Lead for UL, LLC. Previously, he was the CEO of HOMER Energy. Since 1992, he has been the developer of the National Renewable Energy Laboratory's HOMER® hybrid power optimization software, which has been used by over 250,000 energy practitioners in 193 countries. Dr. Lilienthal negotiated the license with NREL for HOMER Energy to be the sole world-wide commercialization licensee to distribute and enhance the HOMER model.

Dr. Lilienthal was the Senior Economist with International Programs at NREL from 1990 – 2007. He was one of the creators of NREL's Village Power Program. He has a Ph.D. in Management Science and Engineering from Stanford University. He has been active in the field of renewable energy and energy efficiency since 1978. This has included designing and teaching courses at the university level, project development of independent power projects, and consulting to industry and regulators. His expertise is in the economic and financial analysis of renewable and microgrid projects.

https://www.linkedin.com/in/peter-lilienthal-ph-d-8a44698/

# 11:05 am Robyne (Kassen) Corcoran, Designer, Energy ML, Robots, and Fusion: Power of Collaboration, building a Brain Bank for 100 Years of Fusion to get to fusion faster



**Robyn Corcoran** 

Design Thinker, Product Designer, Building a Better World through Conscious Design: Better Breath, Better Brain, Better Planet. Disruptor for our Planet's Health, Founder new clean Energy and Water company.

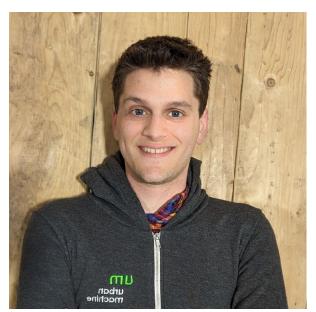
The coLAB will also help fund a new fusion and water company, IExO, who are dedicated to making small, handheld infinite clean safe energy and infinite clean water in the hands of the people. By creating a vision, assembling and coordinating experts, and working together, we can create something out of nothing and get to fusion and solving the energy and water crises faster.

#### Bio

Robyne (Kassen) Corcoran is an award-winning architect and designer with a focus on designing for health and human sustainability. She is known for her innovative approach to building and testing new materials using computer-aided design and fabrication. Robyne has founded two companies, Pedestrian Studio and Urban Movement Design, partnering with various public and private organizations to design and work on multiple projects. Her work has been recognized with the Young Architects Award in Rome, Italy, and has been featured in various publications worldwide. In 2022, Robyne began designing products to make water from air, which led her to explore insights for infinite clean energy containment solutions for nuclear fusion with a byproduct of clean water. She is now the founder of IExO, a clean energy and water startup, and the coLAB, a collaboration between fusion companies, universities, and countries to help solve infinite, clean, safe energy solution of fusion faster to get it in the hands of the people to help course correct our planet.

https://www.linkedin.com/in/robyne-corcoran-033a194/

## 11:30 am Alex Thiele, From Lab to Lumber: Sustainable Applications of Computer Vision in Robotics



Remember last year when book reports were guaranteed to be written by humans? Language models haven't been the only thing kicking it up a notch! Over the last 10 years, computer vision has gone from zero to hero, and is now practically a solved problem if you know what tools to use. Our speaker will share their experience as a cofounder at two startups, building computer vision technologies along the way. Delve into the real-world impact of these technologies, as showcased by a cutting-edge startup that leverages robotics for sustainable wood salvaging. Discover how computer vision models are analyzing X-Rays, 3d cameras, and more to identify nails and other fasteners in lumber, revolutionizing the industry and paving the way for a more efficient and eco-friendly future.

**Alex Thiele** 

#### Bio

Alex Thiele is the co-founder and Chief Software Architect of Urban Machine, leading their software efforts. The team is on a mission to convert wood waste into premium lumber products through innovative robotics solutions. Alex is a startup enthusiast and software geek who pursued a bachelor's degree in robotics at ASU only to later find his true calling in the software realm. Driven by a passion for scalable and well-designed systems, Alex has made an impact in the world of automation engineering by co-founding high tech startups and creating innovative solutions. With a keen focus on computer vision and robotics, Alex continues to redefine the landscape of software-driven automation. In his spare time, Alex makes open-source software/robotics projects and shares them on YouTube.

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

# 12:30 pm Co-founder, Executive Vice President and Chief Operating Officer, Catalyst Energy Services



**Seth Moore** 

As industries explore Environmental, Social and Governance models to improve companies and communities, the energy sector faces challenges in implementing viable innovations while meeting business demands. Offering a competitive alternative to standard fracturing technology, Catalyst Energy Services engineered and introduced Vortex Prime TM—the first-of-its-kind, patent-pending fleet for hydraulic fracturing operators. The company's natural-gas powered, direct-drive turbine technology reduces emissions up to 40%, footprint up to 55% and waste up to 99%.

#### Bio

Seth Moore is the co-founder, Executive Vice President and Chief Operating Officer of Catalyst Energy Services. Having garnered more than 35 years of industry expertise, Seth now dedicates himself to research, engineering new technology, and the implementation of cutting-edge methods within the fracturing arm of the energy sector to improve operating efficiency and lower environmental impact. He has received the Meritorious Engineering Award, published several articles through the Society of Petroleum Engineers and realized multiple international and domestic patents.

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# 12:55 am Gerry Vurciaga, Grid Modernization, Cybersecurity Siemens



**Gerry Vurciaga** 

#### Bio

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

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

## 1:20 pm Christel Hunter, VP Standards at Cerrowire, 'Fault-Managed Power Systems in the 2023 NEC'



Have you heard of packet energy transfer, smart transfer systems, digital electricity, digital current, or pulsed power? These frequently used industry terms describe the newly recognized Fault-Managed Power Systems in the 2023 National Electrical Code. These systems promise higher voltages than PoE and safer installations than traditional wiring methods. We'll explore the regulatory requirements that ensure this technology is ready for commercial and industrial construction.

**Christel Hunter** 

#### Bio:

Christel Hunter teaches electrical code and electrical safety classes for Hunter Technical Services. Chris is vice-president of standards for Cerrowire, President of the Southern Nevada Chapter of IAEI, and serves as the Membership Development Chair for the Las Vegas IEEE Section. Chris also serves on NEC CMP-6 and CMP-13, NFPA 921, NFPA 70B, NFPA 73 and UL Technical Committees 62, 83, 719 and 4703. Chris is an electrical engineer, Professional Safety and Health Officer, Certified Standards Professional, Master Electrician, and LEED Accredited Professional.

https://www.linkedin.com/in/christel-hunter-b450b318/

# 1:45 pm Saif Sayed, Senior Computer Vision Scientist at Johnson & Johnson



The analysis and comprehension of video content hold significant importance in numerous applications such as surveillance, intelligent advertising, and surgical intelligence. Automated recognition of surgical workflow is crucial for the future of operating rooms, as it enhances patient safety by detecting variations in the workflow early on and improves surgical outcomes. We will discuss the basic building blocks of activity recognition approaches and the supervision levels utilized to train these complex spatio-temporal models.

Saif Sayed

# Bio

Saif Sayed is a computer vision scientist working at Johnson & Johnson where he is involved in developing computer aided medical procedures. He graduated from University of Texas at Arlington as a PhD in Computer Science. He is passionate about solving complex, interdisciplinary problems that have a direct impact on human lives.

https://www.linkedin.com/in/saif-iftekar-sayed/

#### 2:10 pm Ruben Arredondo, Distributed Energy Resources, Virtual Power Plants, National Grid, Energy Regulator



**Ruben Arredondo** 

The steady increase in distributed energy resources (DERs), aggregators, and virtual power plant (VPP) has given these solutions a new role in national grids. Given the renewable energy transformation, increased demand for electricity, and the challenges facing the build-out of transmission or other utility scale generation and storage assets, especially in the USA, it's no surprise societies are turning to DERs to support the bulk power system (BPS). But are users and developers of DERs, aggregators, and VPPs ready for the federal and state regulations that may govern them? This presentation offers a brief survey of some federal orders, federal initiatives, state laws and state law initiatives that may impact DERs, encouraging DERs to understand the laws and regulations impacting their business model, or risk seriously impacting their profitability and viability in the future.

#### Bio

Ruben is a former administrative law judge and prosecutor for federal electrical energy regulator WECC (NERC/FERC). A seasoned energy professional, he has advised both domestic and international regulators in Canada, Mexico, the USA, and Europe. With sophisticated legal and technical experience in the electrical industry, he works with subject matter experts to help clients navigate the swamp of regulations governing the electrical industry across North America. He presided over technically complex dockets involving ratemaking and cost recovery, utility-IPP centered litigation, interconnection disputes, transmission access, etc. At the federal and international level, he guided an in-house enforcement team of engineers, cybersecurity experts, and energy professionals tasked with prosecuting some of Western North America's top energy companies for violations of utility standards. He has experience advising clients across the nation on a wide range of renewable energy matters, including: virtual power plant and DER solutions; microgrids and other non-wires alternatives; development of utility scale generation and storage projects; interconnection agreements; interconnection-related disputes; cybersecurity and critical infrastructure protection; transmission line-related issues like path rating, planning, siting, modeling, and capacity issues; advising on generation and storage matters. He has a passion for helping other build the grid of the future.

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

# 2:35 am - Jason Wright, Director, Physical Security AI



Physical Security Technologies. CCTV – what is it capable of doing? Access Control – Mobile keys and advanced capabilities. Drones Land-based drones and why security is not going up. Physical Security AI – Cameras and beyond Access control cards – how to clone over 50% of the cards and how it's evolving. Detection technologies – You're not invisible.

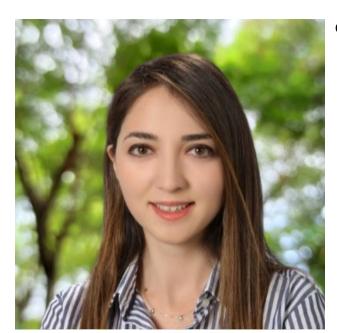
**Jason Wright** 

#### Bio

With over 20 years in physical security technology, with most of the major Silicon Valley tech firms! Jason has worked as End User, Integrations Sr Program Manager, Architect & Engineering security technology manager, security technology manufacturer, and AI firms. Physical Security design projects include Apple Park, Facebook HQ, US Airports, Datacenters and much more. Serves on the ASIS Emerging technology steering committee and has been a leading influencer of physical security technologies.

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

# 3:00 pm Dr. Gokce Ozcelik, Growth and Business Intelligence Lead, Sanveo 'Explore Digital Twins'



Construction Technology

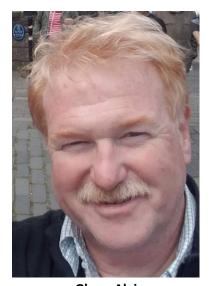
Dr. Gokce Ozcelik

#### Bio

Dr. Gokce Ozcelik is the Growth and Intelligence Lead at Sanveo, a leading technology consulting company in the field of construction technology. She has attained more than 10 years of combined industry and research experience in technology research, innovation, marketing, and competitive intelligence. In her current role at Sanveo, Dr. Ozcelik works on positioning the company's services and solutions in the market and deriving insights for the company's growth. Prior, she served as a Product Owner at a digital supply chain start-up, where she leveraged her creativity and strategic thinking for product development, growth strategy, marketing, and customer success.

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

## 3:25 pm Glenn Algie, AT&T IoT Engineer, 'Proposal for Distributed Entergy control at scale'



Use cases front and behind meter of how DER connected Energy at scale can leverage SIP global deployment for DERs to discover and establish energy transfer sessions that can scale past 1000's of DER control plane connected edges points on a shared power distribution grid. A classic reuse of SIP in 2010 was IPTV distributed resources leveraged SIP.

**Glenn Algie** 

#### Bio

Glenn Algie is an Energy IoT Solutions Architect with AT&T Business, Iot Professional Services group presently innovating advanced multisite end-end behind-the-meter Energy IoT solutions into the Enterprise building market. He holds a Bachelor of Applied Science in Electrical Engineering from the University of Toronto Canada, followed by 28 years in Telecommunications R&D with multiple contributions to IEEE 802 and 1588 and other control plane contributions in the digital transformation of Multimedia through the 90s and 2000s. Then another 15 years developing Al-driven Mobile, IoT, and Energy multiservice convergence gateway platforms. Brushing up recently with UCSD's Microgrid DER communications certificate. it has intrigued him with the digital transformation and rollout of the Distributed Energy control plane and is a new member of the IEEE PES.

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

## 3:50 pm Dr. Behdad Kiani, Hydrogen Fuel Stations for FCEV ZEVs Towards a Carbon Free Energy System



**Behdad Kiani** 

Governor Newsom has issued an executive order that all new in-state sales of passenger vehicles should be Zero Emission Vehicles (ZEV) by 2035. Further, the California Air Resources Board has approved rulemaking requiring that more than half of trucks sold in the state must be zero-emissions by 2035, and all of them by 2045. FLEET (Fleet Electrification and Energy Technology) model has been developed at ITS UC Irvine to study year 2045 when all transportation fleet in California are converted into ZEVs in a carbon free economy. The study reveals the capacity of hydrogen fuel stations required to provide the required energy demand for our future FCEV fleet. This study has been supported through SRTB and RIMI projects. The authors acknowledge the support of the University of California's Institute of Transportation Studies (UC ITS) through the Statewide Transportation Research Program, which was made possible by funding provided by the State of California's Road Repair and Accountability Act of 2017 (SB1), and the Resilient and Innovative Mobility Initiative, a cooperative research and policy engagement initiative led by the UC ITS in partnership with the State of California.

#### Bio

Dr. Behdad Kiani obtained his PhD degree in Energy Systems Engineering from Tokyo University of Agriculture and Technology in 2004. He has a M.Sc. degree in Socio-economics Systems Engineering (Energy Planning Branch) and a B.Sc. in Applied Physics. Dr. Kiani has been working as a Project Scientist at UC Davis and UC Irvine since 2017 where he served as PI in several projects which supported implementation of SB100 and SB350. His research interests include integrated energy systems modeling, technical and economical optimization, grid integration, renewable energy, hydrogen, storage systems and zero emission vehicles.

https://www.linkedin.com/in/behdad-kiani-23387754/

# 4:15 pm Chad Cooper, PSP, 'Physical Security Professional', Motorola Business Development Manager A&E



**Physical Security** 

**Chad Cooper** 

# Bio

Experienced Business Development Manager with a demonstrated history of working in the security and investigations industry. Strong business development professional skilled in Sales, Management, Closed-Circuit Television (CCTV), IP video, networks, Intrusion Detection, Access Control, Systems Design, and Integration.

https://www.linkedin.com/in/chad-cooper-psp/

# 4:40 pm Open

# Greg Billington, Co-Host Visa Global Commercial Card Strategy, OLY, PLY



**Greg Billington OLY** 

#### Bio

Strategy across large market commercial products, specializing in cross border, digital wallet, and Graduate of Visa's sustainability solutions. Olympian and Paralympian Business Development Program (OPBDP), a 24-month program for retired Olympians/Paralympians which places participants in four six-month rotations throughout divisions in the company. Two years of experience as a Business Development Associate. Delivered consulting engagements, signed issuing agreements, and launched a product website in the following functions: Visa Business Solutions, Visa Consulting and Analytics, Visa Direct Commercialization, and NA Community Issuer Sales. Olympian - Competed for the US Triathlon Team in the 2016 Olympic Games and, while working full-time at Visa, raced the 2020 US Olympic Marathon Trials, finishing 37th in 2:17:21. Passionate about enhancing career performance through health and wellness based on skills developed during a 7-year professional triathlon career.

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# Mike Brisbois, Electrical Engineer, Conference Coordinator, Chair of the IEEE Consultant Network Seattle



Mike Brisbois, PE

#### 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.

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# Thank You!

We will see you October 17, 2023

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