

November 3, 2023, 6 am PDT Live Stream Seattle Washington

# Welcome to the World of Al



### IEEE AI IT Artificial Intelligence Symposium – November 3, 2023

6:00 am PDT IEEE Announcements

06:05 am PDT Introduction of Speakers.

Speaker Line up:

06:10 am PDT Debbie Reynolds, Founder Chief Executive Officer

06:35 am PDT Paige Kassalen, Chief of Staff Saab, Inc Strategy Office

07:00 am PDT Tullio Sirausa, AI Meets Design Thinking: Crafting a People-Centric Business Future

07:25 am PDT Dr. Merrick Watchorn, Infraguard Corporate Officer

07:50 am PDT Jeff Glickman, Artificial Superintelligence Quantitative Finance

08:15 am PDT Morris Nelson, Cognitive Genuis, AI Prompt Engineer

08:40 am PDT Donald Thompson, Distinguished Engineer/Engineering AI

09:05 am PDT Hisham Elkholy, Product Manager Artificial Intelligence Stellantis

09:30 am PDT Yong Liu, Head of Data Science High Performance Machine Learning

09:55 am PDT Bhagawan Gnanapa, Founder and CEO SmartTrack AI

10:20 am PDT Dr. Yu Yuan, Entrepreneur in XR/Metaverse/Digital Transformation

10:45 pm Khai Minh Pham, MD, PhD (AI) Founder & CEO at ThinkingNodeLife.ai

11:10 am PDT Sanjay Dani, Directing Generative AI LLM IT Infrastructure SRE

11:35 am PDT Roch Mamenas, IT Consulting business, automation of IT consultancies

12:00 pm PDT Abir Chermiti, Software Engineer Women in Tech Ally

12:25 pm PDT IEEE Prize Pack Giveaway

12:30 pm PDT Salute to our speakers

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### 06:10 am PDT Debbie Reynolds, Founder Chief Executive Officer



Debbie Reynolds "The Data Diva" has made a name for herself as a leading voice in the world of Data Privacy and Emerging Technology with a focus on industries such as AdTech, FinTech, EdTech, Biometrics, Internet of Things (IoT), Artificial Intelligence (AI), Manufacturing, Smart Cities, Privacy Tech, Smartphones, and Mobile App development. With over 20 years of experience in Emerging Technologies, Debbie has established herself as a trusted advisor and thought leader, helping organizations navigate the complex landscape of Data Privacy and Data Protection. As the CEO and Chief Data Privacy Officer of Debbie Reynolds Consulting LLC, Debbie brings a unique combination of technical expertise, business acumen, and passionate advocacy to her work. Debbie is a sought-after speaker and has been featured at conferences and at organizations such as The Berkeley Forum, DocuSign, McDonald's, Fannie Mae, Business Insider, IAPP, IEEE, and PrivSec. She has been featured by media outlets such as PBS, Wired, Business Insider,

Protocol, USA Today, New Statesman, Dark Reading, Morning Brew, Lifewire, CMSWire, Bloomberg, and Digiday. Debbie has been recognized as a true trailblazer in the field with numerous honors and awards. She hosts the #1 award-winning "The Data Diva" Talks Privacy Podcast and has been named one of the Global Top Eight Privacy Experts by Identity Review. In 2020 and 2021, Debbie was named one of the Global Top 30 CyberRisk Communicators by The European Risk Policy Institute. Additionally, she was appointed by the U.S. Department of Commerce to the Internet of Things (IoT) Advisory Board in 2022 and serves as the IEEE Committee Chair for Cyber Security for Next Generation Connectivity Systems at IEEE for Human Control & Flow. Debbie Reynolds is truly dedicated to advancing the field of Data Privacy and Emerging Technology, and she continues to be a driving force in shaping the future of this everevolving industry.

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### 06:35 am PDT Paige Kassalen, Chief of Staff Saab, Inc Strategy Office



How to Ensure Successful Integration of AI into your Organization

Organizations know AI and ML are coming, but these technologies will not be the right solution for all problems. In this talk, I will discuss how to ensure successful implementation of AI into your organization to ensure you are driving real business value. I will be highlighting tips on how to identify opportunities for AI implementation, how to fail fast, and how to ensure your employees are onboard with the changes.

### Paige Kassalen

Chief of Staff at Saab, Inc. Strategy Office & Former Chief Operating Officer at CrowdAI. Paige Kassalen is Chief of Staff for Saab, Inc.'s strategy office, and joined Saab, Inc. as part of an acquisition of her former company, CrowdAI. There, she was Chief Operating Officer for the startup, which was named one of the 50 most promising AI companies by Forbes in 2021. After graduating with a degree in electrical engineering from Virginia Tech, Kassalen worked as an engineer on Solar Impulse 2, the first solar-powered airplane to circumnavigate the globe. She was the only American engineer on the project and the only female ground crew engineer. The role with Solar Impulse landed Kassalen a spot on the 2017 Forbes 30 Under 30 list along with feature articles in Glamour, Fast Company, and the Huffington Post. Kassalen also has a Master of Information Systems Management from Carnegie Mellon University and worked in JPMorgan Chase's AI and ML division before joining CrowdAI and now Saab, Inc.

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### 07:00 am PDT Tullio Sirausa, Al Meets Design Thinking: Crafting a People-Centric Business Future



Al Meets Design Thinking: Crafting a People-Centric Business Future" Explore the transformation of businesses from mere production to genuine human engagement. Discover how AI and Design Thinking combine to prioritize human connections in the modern business world. 1. Historical Perspective: • From 1950s mass production to customer-centricity. • The evolution towards products designed for real customer needs. 2. People-Centric Business Age: • The rise of cloud computing and rapid tech innovations. • Transition from B2B/B2C to the P2P business model. • Design Thinking's role in this new paradigm. 3. Tech and Humanity via Design Thinking: • Empathy as the foundation. • The challenge of maintaining unique business identities. • Weaving the human element back into strategies. 4. Al's Role in Deep Connections: • Case: European company's sustainable energy mission in the U.S. • Al's power in connecting businesses with like-minded individuals. 5. Crafting Experiences Beyond Transactions: Recognizing a business's core values. • Al and Design Thinking unlocking genuine experiences. • Building an

Al-managed community of interest. 6. The Future with Al and Design Thinking: • Emphasis on a people-focused business approach. • Al's role in shaping value-aligned workplaces. • The edge of a people-centric, value-driven approach. 7. Conclusion: • The people-first business model of the future. • Technology as an enhancer, not a replacer, of human connection. • The harmonious blend of Al and Design Thinking fostering genuine community.

**Tullio Sirausa** is a pioneer of disruptive technologies, an emotional intelligence (EQ) thought leader, speaker, author, and coach. For the past 33 years, Tullio has built world class leadership teams in technology companies and startups. As an advisory board member to the University of California, Riverside, Design Thinking Executive Program, he promotes a human-centered approach to innovation with a strong emphasis on empathy. As a founding member of RadicalPurpose.org Tullio is a strong supporter of human dignity in all aspects of life, including people-centric workplaces.

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### 07:25 am PDT Dr. Merrick Watchorn, Infraguard Corporate Officer



Dr. Merrick Watchorn is current research focused on quantum information science, cloud computing, cybersecurity, and open-source intelligence technologies. He is a pragmatic subject matter expert, blending his academic success with nearly three decades of government and commercial experience. He also provides a myriad of services within the Cybersecurity industry based on his sixteen-years of active service in the United States Navy (USN) and the last several within the United States Government (USG). His work background included formal training in semantic ontologies, Big Data analytics, machine learning and artificial intelligence methods, theories, and cognition. As a co-founding member of the Quantum Security Alliance (QSA), he serves as Chair for the Security Reference Architecture (Q-SRA). He has expansive computer and systems experience, including business systems development, complex networking, database management, and advanced programming requirements in classified and unclassified programs. He has proven experienced team leader, supervisor,

and resource manager; with extensive inter-agency experience, while acting as a senior military liaison for all branches of the Department of Defense; including Senior North Atlantic Treaty Organization personnel. He has worked in and around the Washington, DC metropolitan area for the last ten years and provided support for numerous government agencies in distinct roles. He is a former U.S. Military Service member with several years of work in and around the Department of Defense (DoD), Department of Commerce (DoC), Intelligence Community (IC), and Pentagon Force Protection (PFP). He has broad experience as a government certified Automation Data Protection Officer (ADPO), Information Security Systems Officer (ISSO), and Information Security Systems Manager (ISSM), and acted as a directorate level Security Officer for the DoD.

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### 07:50 am PDT Jeff Glickman, Artificial Superintelligence Quantitative Finance



Generative AI: What it is, how it works, how to use it, its issues, limitations, and risks.

"Generative AI" is a transformative force shaping industries and disciplines. This lecture provides an overview of this powerful technology. We'll define Generative AI, explore its core principles and mechanisms, and the algorithms that power it. Practical insights on how to effectively utilize Generative AI will be presented, empowering attendees with knowledge to harness its potential. We'll also examine the ethical concerns, limitations, and potential risks associated with its use.

Mr. Jeff Glickman is a computer scientist trained at the University of Illinois at Urbana-Champaign. His expertise is in artificial intelligence, image processing and stochastic computation. He holds numerous patents including foundational patents for machine learning and built the first artificial superintelligence. He is the Chair Emeritus of the Seattle Section of the Institute of Electrical and Electronic Engineers (IEEE), Senior Member of the IEEE, and previously served on the IEEE Technical Committee on Semantic Computing. He is President Emeritus of the American Society for Photogrammetry and Remote Sensing, Puget Sound Region and has served on the ASPRS Forensics Working Group and the ASPRS Student Advisory Committee. He served on the Washington State Forensic Investigations Council where he had oversight responsibilities for the Washington State Crime and Toxicology Laboratory system. Mr. Glickman is the past Chairman of the City of Hood River, Oregon, Planning Commission and the past Deputy Mayor of Woodinville, Washington. Mr. Glickman currently serves as Chairman and CTO of J4 Capital LLC, an Artificial Intelligence investment advisor, and is an Advisor to DiRAC for the Vera C. Rubin Observatory. He is a frequent contributor on television, in newspapers, and at conferences.

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Morris Nelson

Al Prompt Engineer | Artificial Intelligence, Digital Marketing, SEO, Websites. I help entrepreneurs, small businesses and non-profits promote their services and products using social media tools. Morris is with LLM Engineering.

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### 08:40 am PDT Donald Thompson, Distinguished Engineer Al



Multi-agent systems such as Auto-GPT, BabyAGI, and AgentGPT, that can perceive their environment, decide actions and work towards achieving specific goals, represent an important evolution in AI technology. These agents, which form part of systems that encourage collaboration between multiple entities to solve complex problems, are leading us towards the potential of Artificial General Intelligence (AGI). AGI is a theoretical concept that aims to produce a type of intelligent agent capable of executing any intellectual task that human beings or animals can perform. However, it has a long road ahead before this can be fully achieved. Also, advancements in the union of vision, language, and action like the Robotic Transformer 2 (RT-2) are essential in the development of multi-modal and embodied AI, which forms another vital part of AGI – integrating cognitive capabilities with sensory perception and motor actions in a physical body. These strides in AI innovation are setting the stage for profound transformations in our understanding and use of artificial intelligence.

### **Donald Thompson**

Donald is a Distinguished Engineer, with focus on primarily overseeing companies generative AI strategy, architecture, and technology. He has more than 35 years of hands-on experience as a technical architect and CTO, with an extensive background in designing and delivering innovative software and services on a large scale. In 2013, Donald co-founded Maana, which pioneered computational knowledge graphs and visual no-code/low-code authoring environments to address complex AI-based digital transformation challenges in Fortune 50 companies. During his 15 years at Microsoft, Donald started the Knowledge and Reasoning group within Microsoft's Bing division, where he innovated "Satori", an internet-scale knowledge graph constructed automatically from the web crawl. He co-founded a semantic computing incubation funded directly by Bill Gates, portions of which shipped as the SQL Server Semantic Engine. Additionally, he created Microsoft's first internet display ad delivery system and led numerous AI/ML initiatives in Microsoft Research across embedded systems, robotics, wearable computing, and privacy-preserving personal data services.

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### 09:05 am PDT Hisham Elkholy, Product Manager Artificial Intelligence Stellantis



Al Ethics & Governance

Artificial Intelligence (AI) has seamlessly integrated into our daily lives, from powering Fortune 500 hiring processes to curating personalized playlists on our favorite music apps. However, with this widespread integration comes a pressing need to address ethical considerations. How do we ensure that AI systems make decisions that are fair, unbiased, and respect our values? This presentation will unravel the complexities of AI ethics, shedding light on critical topics such as algorithmic transparency, accountability, and the mitigation of biases. We'll explore real-world cases where AI systems have posed ethical dilemmas and discuss strategies to navigate them responsibly. By attending this presentation, you'll not only gain a deeper understanding of the ethical dimensions of AI, but also

become equipped with practical insights to drive positive change in the way we develop and deploy AI technologies.

### **Hisham Elkholy**

With formal training as a mechanical engineer, Hisham Elkholy has garnered extensive experience across diverse industries, including energy, food manufacturing, and automotive. Throughout his career, he observed a common thread—the increasing significance of data in driving innovation and competitiveness across industries. Recognizing this pivotal shift, he made a strategic career pivot and currently holds a position at Stellantis (formerly Fiat Chrysler Automobiles), where he manages artificial intelligence products.

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### 09:30 am PDT Yong Liu, Head of Data Science High Performance Machine Learning



### Dr. Yong Liu

A passionate Data Scientist and Technical Leader with an excellent R&D track record: Dr. Liu has been working on "Big Data", "Big Compute" and "Big Learning" since his first login onto an SGI Origin 2000 supercomputer back in 1997 at the National Center for Supercomputing Applications (NCSA) at Illinois. Yong recent industry experience includes developing high performance transfer learning NLP models, building predictive maintenance solution (Industrial Internet of Things) for industrial digitalization revolution for Fortune 500 companies, language modeling in the Xbox production system, big data analytics using Bing search stacks. He truly believes that HPC Cloud and Big Learning (transforming big data to continuous insight and intelligence) is just entering the mainstream. His experience at NCSA has been leading cutting-edge R&D projects funded by the National Science Foundation (NSF), Microsoft Research (MSR) and other industry partners with a focus on building integrated data and

compute-intensive systems using technologies from Sensor Web, Mobile+Cloud Computing, Cyber-Physical System, Geospatial and Semantic Web. The application areas of these projects include digital urban informatics, virtual environmental observatory, and holistic decision support systems. Dr. Lui has been a frequent speaker at Spark+AI /Data+AI Summit, ACM/IEEE CCGrid HPML (High Performance Machine Learning) workshop, IEEE eScience conferences, ACM GIS conferences, Supercomputing Conferences, Dagstuhl Seminar and many other computing, data, and ML/NLP workshops at national and international levels. He has been a Principal Investigator or Co-Principal Investigator for several NSF and MSR projects and has successfully led a team of researchers, students, and engineers to collaborate with various domains of experts to complete challenging and rewarding projects.

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### 09:55 am PDT Bhagawan Gnanapa, Founder and CEO SmartTrack AI



### **Generative AI for Predictive Maintenance:**

In the growing field of smart industries, combining Generative AI with predictive maintenance is like opening a new chapter of improving how things work and last longer. Generative AI can create realistic data scenarios, helping us better understand how our equipment is doing. When this is paired with predictive maintenance, which is about fixing things before they break, we get a powerful tool for avoiding unexpected problems. This mix not only makes our important equipment more reliable but also encourages a practical, data-driven approach that sets companies apart from the competition. As we explore this partnership, we find many chances to cut down on unwanted downtimes, save on operational costs, and promote long-lasting industrial practices. This blend of Generative AI and predictive maintenance is reshaping the industrial world, leading businesses towards a period of better efficiency and creativity.

### **Bhagawan Gnanapa**

With a passion for innovation and over twenty years of experience, Mr. Gnanapa has dedicated his career to using cutting-edge technology to solve real-world business problems. He has a patent to his name and has led projects that use AI to predict equipment failures and automate financial processes. Bhagawan has founded Smarttrak AI to help businesses use AI to improve their operations. His team has worked on exciting projects, like using advanced computer models to better understand complex data, all with the goal of making AI solutions that are practical and easy to use. He has also consulted various industries like Automotive, Robotics, and Finance to help them implement AI strategies. He believes in not just creating smart technology, but making sure it can be used effectively in the real world.

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### 10:20 am PDT Dr. Yu Yuan, Entrepreneur in XR/Metaverse/Digital Transformation



Dr. Yu Yuan, President of IEEE Standards Association, is a visionary researcher, inventor, practitioner, and entrepreneur in the areas of Consumer Technology, Multimedia/VR/AR, Connected/Automated Vehicles, IoT, and Digital Transformation. He founded 0xSenses Corporation (also known as Senses Global Corporation or Senses Global Labs & Ventures in different countries), a multinational technology company specializing in Virtual Reality, Augmented Reality, and Human Augmentation. Dedicated to "Creating Better Worlds" as its long-term vision, the company is developing technologies, infrastructures, ecosystems, resources needed for massively multiplayer ultrarealistic virtual experiences. The company is also engaged in technology consulting, technology transfer, and system integration services to help with the Digital Transformation of its clients in various industries. It has been proactively supporting standards development for emerging technologies (VR/AR/MR/XR, Blockchain, AI, IoT, Big Data, Digital Twin, Smart Lifestyle, etc.) in

collaboration with many other companies and institutions. Prior to this he worked for IBM Research as a research scientist and was a key contributor to IBM's Cell Broadband Engine, Smarter Planet, and IoT initiative. He has been a passionate volunteer in various leadership positions at IEEE and other professional organizations. His outstanding service in IEEE standards activities at different levels (working groups, standards committees, and governance at higher levels) has been widely appreciated by standards developers, individual members, and entity members. He is also serving as Director of IEEE Board of Directors, Member-at-Large of IEEE Consumer Technology Society Board of Governors, Chair of IEEE Consumer Technology Society Emerging Technology Standards Committee (CTS/ETSC), Vice Chair of IEEE Photonics Society Standards Committee (PHO/SC), Secretary of IEEE Consumer Technology Society Blockchain Standards Committee (CTS/BSC), Chair of IEEE VR/AR Advisory Board, and Corresponding Member of IEEE Technical Activities Board Committee on Standards. He has a Ph.D., an M.S., and a B.S. in Computer Science from Tsinghua University.

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### 10:45 am Khai Minh Pham, MD, PhD (AI) Founder & CEO at ThinkingNodeLife.ai

From Machine Learning to Machine Reasoning and why it matters.

The explosion of LLM has been amazing and it helps to put AI on the map for the public. LLMs have taken a lot of us by surprise in their abilities to interact with humans in a way that has never been done before. The fundamental technology behind these LLMs is Machine Learning or more precisely Deep Learning. Today, for a lot of people Machine Learning is a synonym for AI. However, it is important to distinguish between the two main schools of AI. The first one is physicalist where researchers stated that to reproduce intelligence, we need to reproduce neurons since it is the biological foundation for our intelligence. It's how we have Artificial Neural Networks and the most used is Deep Learning to provide Pattern Recognition. The second one is symbolic where researchers are more focused on the way human cognition emerges and where Reasoning is central. The public doesn't hear much about Reasoning AI because the existing approaches are centralized. It cannot represent the diversity of the different types of reasoning and cannot scale. Today, Distributed Reasoning AI addresses these limitations. This talk will insist on the crucial difference between Pattern Recognition and Reasoning and why it matters based on the problem you want to solve. As Eric Schmidt mentioned in a tweet "We need to teach AI Reasoning over simple Pattern Recognition".

### **Khai Minh Pham**



Combining Medicine (MD) and Artificial Intelligence (PhD), Dr. Khai Pham has been in the field of AI for 30 years. Few have tried to work on unifying AI approaches across the different systems, including Machine Learning, Reasoning AI, and Distributed Multi-Agent AI. He is a leading expert in Distributed AI and focuses today on developing the next-gen Generative Distributed Reasoning AI (GDR-AI). Applied to drug R&D, GDR-AI generates the most sophisticated Digital Human Cell Clones based on gene expression data allowing Human Cell Safety/Efficacy Simulations before any preclinical testing.

**Dr. Khai Minh Pham** is also a founding board member of KWAAI.ai, a non-profit AI Research and Development Lab Democratizing AI. He mainly contributes to the AI Fundamentals. He was the founder & CEO of DataMind, a leading AI company in the Silicon Valley based on the first generation of his Distributed AI. Later renamed RightPoint, it was acquired by Epiphany (Nasdaq: EPNY) for US\$637 Million.

M.D. and Ph.D. in AI (Magna Cum Laude at Sorbonne University Paris). Dr. Pham has published several scientific papers, received international grants, taught AI at LISH-CNRS, received an entrepreneur award from BP, was EIR/Mentor at CONNECT, talked as keynote in conferences and guest lecturer for Master Program.

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### 11:10 am PDT Sanjay Dani, Directing Generative AI LLM IT Infrastructure SRE



Sanjay Dani

Combining 30+ years of experience in diverse technological and leadership roles, Mr. Dani thrives on continuous learning, stakeholder empowerment, and creating substantial impact. His journey spans from leading datacenter initiatives to clean energy innovations. With proven success in marketplace strategies and team transformations, He has effectively communicated visions at the board and C-levels, managing cross-disciplinary teams. Sanjay is experienced as a hands-on team leader in fine tuning open-source LLM models on custom data for real-time insights without compromising on data security, compliance, and integration with enterprise services; datacenter infra, ops, arch and services (DevOps & SRE); systems software development, theory and practice in scalable distributed systems.

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### 11:35 am PDT Roch Mamenas, IT Consulting business, automation of IT consultancies



**Roch Mamenas** 

Head of EmployPlan Corp, Author of the https://techconsulting.ai Paid Newsletter for Consulting Executives looking to implement AI to optimize their processes. Our software can help your agency save thousands of hours each year, bringing autonomous AI to your resource planning workflow's doorstep. Automatically track skills across your organization without need for a dedicated process, upskill, and reskill team members according to your project demand as you plan your project engagements automatically. Discover and act on risks as you plan.

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### 12:00 pm PDT Abir Chermiti, Software Engineer Women in Tech Ally



Abir Chermiti is a Certified Harvard Business Strategist, Entrepreneurship & Business Coach and an Awardwinning 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.

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12:30 pm PDT Salute to our speakers



## Advancing Technology for Humanity

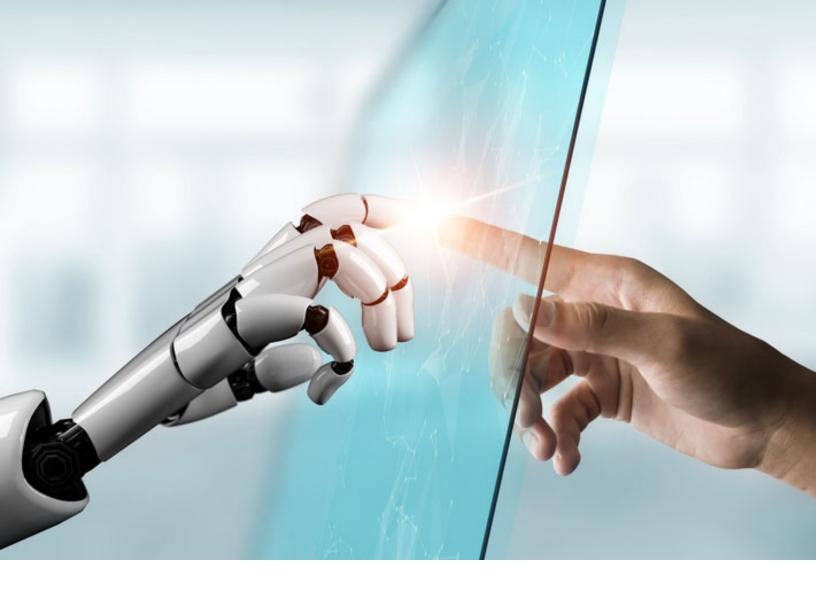




**Mike Brisbois, Conference Director** 

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. Completed the Certified Energy Management course. He is a board member at several technical organizations.





### Thank You!

See you in Phoenix.



