AUGMENTED REALITY AND EMERGING TECHNOLOGY FOR ELECTRIC UTILITIES SYMPOSIUM

Practical Applications and Use Cases of AR & MR in Utility Safety, Efficiency, and Training

May 20-21, 2019
JW Marriott Cherry Creek
Denver, CO
OVERVIEW

Augmented Reality and Mixed Reality are new technologies which offer many benefits for utilities today. From valuable analytics and accurate data acquisition to improved worker safety and onboard training, AR and MR offer energy providers the tools necessary to save money and conserve time spent on field projects. Beyond this, over 60% of the utility workforce will be qualified to retire from the energy field by 2020 with millennials being their replacement. AR and MR offer valuable, cost-effective strategies for visual training and interactive maintenance in a way that is familiar to this oncoming workforce.

At this symposium, utilities will be given practical, real world examples of AR/MR use-cases from around the country. Different topics of direct application will be discussed such as workplace integration, safety, training, GIS adaptation, and more. Here from a list of case studies and analytic insights from leaders in the industry, including some presenting their results for the very first time! Join us as we evaluate how AR/MR is helping the energy field modernize and adapt to today’s standards of efficiency and expediency.

LEARNING OUTCOMES

• Explain fundamentals of AR technology for utilities
• Hear practical use-case studies from utilities
• Hear how AR is being used to reduce workplace accidents and increase employee safety
• Discuss how to effectively integrate AR into existing training, infrastructure, and company culture
• Best practices in GIS adaptation to Smart Technology tools for easy assessment and repair
• Evaluate other practical applications of AR for utilities such as underground distribution, maintenance identification, and remote video assistance
• Educate new IEEE standards on AR/MR use in utilities
• Showcase cost-effective training strategies for onboarding engineers
• Evaluate potential to enhance worker safety and equipment protection
• Describe methods for interpreting and utilizing AR data

WHO SHOULD ATTEND

• Teams of Emerging Technologies
• Manager of:
  • Mixed Reality
  • Safety and Compliance
  • Training
  • Smart Grid Development
  • Information Technology
• Directors of
  • Safety
  • Emerging Technology
  • Grid Modernization
• T&D Engineers
  • Underground

REGISTER TODAY! CALL 303-770-8800 OR VISIT WWW.EUCI.COM
AGENDA

MONDAY, MAY 20, 2019

8:00 – 8:30 am    Registration and Continental Breakfast

8:30 – 10:30 am   A Modern Landscape of AR & Its Applications for Utilities

The Electric Power Research Institute (EPRI) has been exploring the potential impact of augmented reality and wearable technology for almost a decade. Come hear the results of this research in the area of transmission, distribution, and generation. Case studies and ROI’s will be presented.  

John Simmons, Associate Professor, Alfred University

10:30 – 11:00 am  Morning Break

11:00 am – 12:00 pm Augmented & Virtual Reality for Utility Operations: Applications, Challenges and Recommendations to Market Players

Electric utilities have never been known as early adopters of cutting-edge technology. That does not mean they must always be late to every party. Innovative hardware improvements and progressive software applications mixed with decreasing costs have opened the door for utilities to be pioneers in the deployment of industrial digital reality technology. Historically, augmented reality (AR) and virtual reality (VR) have teetered precariously on the edge of practicality (outside of gaming), with limited perceived benefits and functionality, prohibitive costs, and developmental roadblocks. More recently, many factors driven by operational applications have contributed to an uptick in utility interest and expansion of vendor offerings. This presentation discusses the latest market trends in virtual and augmented reality for grid applications and explores current and potential applications for small- and large-scale utility deployment. It also provides detailed and actionable recommendations on how utilities and device vendors can address the fast-changing market.

This presentation will include a discussion of the following:

• The digital reality spectrum includes assisted, augmented, mixed, and virtual reality, which leverage hands-free devices, digital overlay display glasses, and immersive headsets
• Digital reality can enhance outage restoration, asset management, workforce management and training, and even sales and marketing, among other utility applications
• The vendor landscape for digital reality devices is shifting and utilities are seeking staying power
• Digital reality devices must be safe, simple, flexible, secure, reliable, and affordable to drive widescale adoption
• More than half of utility field crews will likely be equipped with AR or VR devices within 5 years

Michael Hartnack, Global Smart Grid Market Expert & Consultant, Navigant

12:00 pm – 1:00 pm Group Luncheon

1:00 – 2:00 pm How XR will Power Human Potential

How Immersive Experiences (XR) will Power Human Potential: Zpryme is working with utilities and schools on both AR and VR to impact and expand human potential and imagination. The session will discuss VR/AR programs being used at Austin Energy and CPS Energy to engage citizens in new ways and to educate students about electric vehicles.

Jason Rodriguez, CEO, Zpryme
AGENDA

MONDAY, MAY 20, 2019 (CONTINUED)

2:00 – 3:00 pm  Modern Utility Case Study in Experiential Training with AR
Scott Sommers, Client and Corporate Development, Index AR Solutions and Mike Hoff, Director of Business Optimization and Innovation, MidAmerican Energy, (770,000 electric and 751,000 gas customers) will be discussing how Augmented Reality and eBooks are being used to modernize the MidAmerican Gas Tech Apprentice training program, reducing the time needed to train a qualified and customer centric GasTech. The Gas Tech Apprentice program has multiple AR experiences and provides content in a format millennials have grown up with. Using AR experiences and eBooks MidAmerican is replacing traditional text books, notebooks and VHS tapes removing the learning friction experience by millennials when faced with traditional materials. The overall result is the learning process is both dynamic and experiential, resulting in improved outcomes.

Mike Hoff, Director of Business Optimization and Innovation, MidAmerican Energy
Scott Sommers, VP, Index AR

3:00 – 3:30 pm  Afternoon Break

3:30 – 5:00 pm  Future of AR/MR and practical Investments for Utilities
A summary of the modern standards, technology, and availability technological tools for utilities. In this session we will hear from a panel of different perspectives on the future of technology in the energy field and the ways in which it is shaping the industry.

John Simmons, Associate Professor, Alfred University
Jason Rodriguez, CEO, Zypryme
Zachary Wassenberg, Managing Partner, Burns & McDonnell

5:00 pm    Day One Adjourns

TUESDAY, MAY 21, 2019

8:30 am – 9:30 am Transform Business with Mixed Reality Business Applications
See first-hand how organizations are using Mixed Reality Business Applications to empower a new dimension of work—transforming business operations, and providing solutions to help employees work smarter, more collaboratively, and more efficiently with information they can access in the context of their work. Learn what we are working on now, and in the future to help shape the next generation of computing.

Tera Long, Mixed Reality Business Strategy, Microsoft

9:30 – 10:30 am  Marketplace Benefits and Tools for Effective AR Implementation
The imminent appearance of AR in the marketplace will benefit the power utilities and other enterprises that have thought through both the value and the implications for their traditional practices. Bringing AR to utility field personnel an provide an excellent way of presenting data when and where it’s most needed. These tools also enable greater leveraging of institutional knowledge in a very effective manner, bridging the gap between new talent and seasoned personnel. This 1-hour session will cover what leading utilities are doing in the AR/VR space.

Ron Chebra, VP of Grid Modernization, EnerNex
10:30 – 11:00 am  
Morning Break

11:00 am – 12:00 pm  
Practical Lessons in Deployment and Integration of AR for Utilities

Augmented reality (AR) has taken the utility industry by storm. From discussion panels at DistribuTECH, IEEE PES T&D, and large utility attendance at AR conferences such as the Enterprise Wearable Technology Summit the questions begin to shift from what is AR to how do I deploy AR?

This session hosted by Burns & McDonnell and Manitoba Hydro International explores experiences with utility AR pilots and enterprise roll-outs and the process of deploying utility grade technologies. The session will dive into challenges a utility may experience during an AR pilot and how to overcome them. Specific utility use cases that will be discussed are field to office video communication, workflows, and know and unknow asset inspections.

Zachary Wassenberg, Electrical Engineer, Burns & McDonnell
INSTRUCTIONAL METHODS

PowerPoint presentations and open discussion will be used.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for the entirety of the conference to be eligible for continuing education credit.

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 1.0 CEUs for this conference.

EVENT LOCATION

A room block has been reserved at the JW Marriott Cherry Creek, 150 Clayton Lane Denver, CO 80206, for the nights of May 19-20, 2019. Room rates are $239 plus applicable tax. Call 1-303-253-3065 for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is April 29, 2019 but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

SPONSORSHIP OPPORTUNITIES

Do you want to drive new business through this event’s powerful audience? Becoming a sponsor or exhibitor is an excellent opportunity to raise your profile before a manageably sized group of executives who make the key purchasing decisions for their businesses. There is a wide range of sponsorship opportunities available that can be customized to fit your budget and marketing objectives, including: Platinum, Gold, or VIP sponsor, Reception host, Networking break host, Tabletop exhibit, Workshop sponsor, Lanyard sponsor, Luncheon host and Breakfast host.

Please contact Aaron Voss at avoss@euci.com or 720-988-1228 for more information.
A room block has been reserved at the JW Marriott Cherry Creek, 150 Clayton Lane Denver, CO 80206, for the nights of May 19-20, 2019. Room rates are $239 plus applicable tax. Call 1-303-253-3065 for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is April 29, 2019 but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

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How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

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OR Enclosed is a check for $ to cover registrations.

Substitutions & Cancellations
Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before April 19 29, 2019 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of conference cancellation, EUCI’s liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800.

EUCI reserves the right to alter this program without prior notice.