



# NEWSLETTER

July 2023

## MESSAGE FROM OUR EXECUTIVE DIRECTOR

This summer, as we celebrate our patriotism and the spirit of innovation, it is remarkable to witness how the emergence of Artificial Intelligence (AI) is transforming industries and propelling us towards a future where technology augments our capabilities for the betterment of society.

The construction industry, known for its complex projects and intricate processes, is rapidly embracing technological advancements to revolutionize traditional practices. By leveraging Al technology, contractors can enhance productivity, improve safety measures, optimize resource management, and streamline decision-making processes.

Al programs, or algorithms, offer construction companies the ability to analyze vast amounts of data and generate valuable insights for efficient project planning and design. Historical project data can be utilized to identify patterns and optimize construction schedules, resulting in improved timelines and resource allocation. Al-powered design tools automate repetitive tasks, allowing professionals to focus on creative aspects. Additionally, Al algorithms can analyze site conditions and environmental factors, aiding in the optimization of building designs for energy efficiency and sustainability.



Safety is paramount in construction, and AI can play a significant role in ensuring safer worksites. Algorithms can analyze historical safety data to predict and prevent accidents, enabling proactive measures to be implemented. Real-time monitoring systems equipped with AI capabilities can detect safety violations or hazardous conditions, alerting supervisors and workers promptly. Wearable technologies integrated with AI can provide workers with real-time feedback and warnings, reducing the likelihood of accidents.

Efficient resource management is crucial for construction projects, and Al algorithms are able to optimize resource allocation. By analyzing various data sources such as weather conditions, supply chain logistics, and labor availability, these technologies can predict material requirements, reduce delays, and minimize cost overruns. Algorithms can analyze equipment performance data to identify maintenance needs in advance, reducing downtime. Additionally, Al-powered systems can assist in inventory management, minimizing waste and maximizing productivity.

The integration of AI in the construction industry offers numerous benefits. From efficient project planning and design to enhanced safety measures and optimized resource management, these technologies are revolutionizing our sector. By embracing AI, contractors can drive productivity, improve safety, and make data-driven decisions, ultimately transforming the way construction projects are executed. As always, the first step is to consider how AI platforms are applicable to your organization. Consider a data-first approach and ensure that you are tracking accurate information to proactively drive efficiency and efficacy in your business.



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# **AROUND THE INDUSTRY**



### WHAT WE'RE READING

- Finding the Right Use Cases for AI in Construction Takes Effort 6/15/23, Engineering News-Record
- Significant Digital Transformation Underway as Research on U.S. and Canadian Construction Sector Suggests a Data-driven Future 6/22/23, TechTarget
- Contractors swap hard hats for helmets 6/29/23, ConstructionDive

### INDUSTRY PIONEERS



"Innovation is being able to ask the hard questions and being willing to be uncomfortable doing so. Not just thinking outside of the box but looking for the next box altogether."

#### **Zack Scott**

Special Projects Group Division Manager NII Edison Cohort, 2021 – 2022



Click/Scan for more info about the NECA Innovation Institute









"Construction technology is a career that is out there for you regardless of where you start your career path."

# Liz Campbell

Director of Chapter Development at Atlanta Electrical Contractors Association



Click/Scan to check out the Innovation Overload Podcast

#### **Celebrate Your Innovators!**

The **NECA Innovator of the Year** is awarded to an industry pioneer from a NECA member contractor who champions innovation and continuous improvement across their company and the entire NECA community.







#### **UPCOMING EVENTS**

- ELECTRI Council Meeting7/17/23 7/19/23 in Kohler, WI
- Builtworlds Con Tech Conference
   7/19/23 7/20/23 in Chicago, IL
- National Training Institute (NTI)7/29/23-8/1/23 in Ann Arbor, MI





