

EarthCam Expands Artificial Intelligence Capabilities to Improve Construction Safety

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Upper Saddle River, New Jersey, June 07, 2023 (GLOBE NEWSWIRE) -- EarthCam, the leader in live camera technology, content and services, today announced a breakthrough in its [AI camera technology](#) for jobsite safety at ENR FutureTech. Its latest AI algorithms can now detect when workers are operating at height with significant accuracy. The Occupational Safety and Health Administration (OSHA) states that falls are the leading cause of fatalities in construction. An incremental improvement in safe practices due to better awareness created by objective AI camera analytics has real potential to prevent many injuries and deaths.

EarthCam's new Edge Computer Vision and AI Object Detection software sends customized alerts based on predefined actions such as when people climb a ladder, work on scaffolding or operate an elevated scissor lift. Safety personnel can retrieve detailed recorded video to verify safe practices are being observed, fall protection is applied and PPE is correctly worn. In-person site visits by safety inspectors can be supplemented with remote, visual validation of safe behavior.

"Detecting workers at height is one of the most in-demand, yet challenging AI models to develop, said Brian Cury, CEO and Founder of EarthCam. "EarthCam's unique expertise in deploying and managing automated robotic cameras, together with advanced deep learning will instill best practices with unbiased data."

EarthCam's visual data from jobsites has helped keep generations of construction workers safe while mitigating risk for stakeholders. As the company continues to develop its AI algorithms to improve worker safety and progress monitoring, EarthCam is expanding its team of in-house data scientists. Hasan Almawi joined EarthCam in May 2023 to lead its Computer Vision and Machine Learning teams. Almawi brings a strong background in computer vision and deep learning from his work in health sciences. He developed AI to help prevent musculoskeletal injuries and to test treatment plans for currently incurable diseases. Almawi's significant expertise will help EarthCam accelerate development and efficiency for its AI Object Detection functions.

[A recent article](#) in Engineering News-Record (ENR) explained the unique assets that EarthCam AI uses to improve construction safety. "Many AI developers resort to image search engines or purchase synthetic data to train their systems. EarthCam, however, has a library of millions of images from jobsite cameras going back more than two decades," said Jeff Yoders, associate technology and equipment editor at ENR. "Because all of the images came from real jobsites with EarthCam installations, they were able to avoid the errors that can come from training a computer vision algorithm on the cleaner promotional shots of equipment or PPE found in catalogs or sales materials."

EarthCam continues to pioneer AI software and services that are highly relevant for the construction industry. EarthCam analytics already include weather sensor data, equipment identification and activity heat-maps. AI Object Detection recognizes specific vehicle

types and AI proximity advisories are sent when workers are close to energized equipment. License Plate Recognition automatically handles access control, verifies deliveries and sends alerts to management.

EarthCam's Control Center has long been the software of choice among industry leaders for smart project documentation, safety and security. EarthCam provides camera rentals, professional installation and reality capture services to make construction project management more efficient with powerful visual data. To learn more about EarthCam AI, visit EarthCam.net/AI or meet EarthCam at ENR FutureTech EarthCam.net/FutureTech.

ABOUT EARTHCAM

EarthCam® is the global leader in providing live camera technology, content and services. Founded in 1996, EarthCam provides live streaming video, time-lapse construction cameras, 3D/4D BIM model integrations and security solutions for corporate and government clients. EarthCam leads the industry with the highest resolution imagery available, including the world's first outdoor gigapixel panorama camera system. This patented technology delivers superior multi-billion pixel clarity for monitoring and archiving important projects and events. EarthCam has documented over a trillion dollars of construction projects around the world. The company is headquartered on a 10-acre campus in Northern New Jersey.

Projects documented by EarthCam include: One Vanderbilt, St. Regis Chicago, Hudson Yards, UBS Arena, SoFi Stadium, Allegiant Stadium, Mercedes-Benz Stadium, LAX Airport, Moynihan Station, San Francisco Oakland Bay Bridge, Panama Canal Expansion, The Red Sea Project, The Jeddah Tower, Academy Museum of Motion Pictures, Whitney Museum of American Art, Louvre Abu Dhabi, Smithsonian National Museum of African American History and Culture, One World Trade Center, Statue of Liberty Museum and the Smithsonian Air & Space Museum.

Learn more about EarthCam's innovative solutions at EarthCam.net.