Automating Pipeline Inspection with Computer Vision and Deep Learning

DC Water distributes drinking water and collects and treats wastewater for more than 672,000 residents and 17.8 million annual visitors in the District of Columbia. The manual review of and classification of video scans of sewers and utilities pipeline infrastructure can be time consuming. DC Water was looking for a better way of conducting analysis and reporting of pipelines to optimize service and repair and infrastructure replacement and lower costs. DC Water, in collaboration with Wipro, developed Pipe Sleuth to automate the process of identification, annotation, scoring/grading of pipeline health and reporting of pipeline defects. Optimized Pipe Sleuth with Intel® Xeon® Scalable processors and Intel® Distribution of OpenVINO™, resulted in faster time-to-market, cost savings on analysis and allows for more spending on capital improvements.

“We are using Pipe Sleuth to inspect our sewer network. It is a very innovative solution that dramatically increases inspection productivity and significantly reduces costs while at the same time improving the overall defect detection rate. Having the option to run Pipe Sleuth on our existing Intel-based platforms was an added benefit.”

Tom Kuczynski, Vice President, Information Technology, DC Water

Products and Solutions
Intel® Xeon® Scalable processors
Intel® Distribution of OpenVINO™ toolkit

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