

Alignment Mapping of Structural Members and Rollers in a Steel Mill using Terrestrial Lidar Point Cloud

Dr. Sagar Deshpande, Ph.D.

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Join from the meeting link
<https://tinyurl.com/TransTech-Talk-10>



ABOUT THE TALK :

Factories and warehouses around the world utilize gantry girder cranes to transport heavy material and equipment within their facilities. These cranes run on runway rails that are supported by girders, which in turn are supported by columns. Over time, due to repetitive loading, these rails, girders, and columns deform and may eventually fail. Hence, regular inspection and maintenance of these structural members is crucial for safe and reliable operation. So, the presentation focuses on a time-efficient method to extract and model rail and girders and rollers used in steel industry using terrestrial lidar point cloud data.

ABOUT THE SPEAKER :

Dr. Deshpande is a Senior Geospatial Technology manager at Dewberry, Virginia, USA. He has over 20 years of experience in the field of geospatial technology including Surveying, GIS, and Photogrammetry. His research highlights are the development of a semi-automated method to hydro-flatten lidar data, semi-automated bluff line extraction method using lidar data and ortho images and use of aerial and satellite images for 3D mapping. Dr. Sagar Deshpande has earned his Ph.D. and Master of Geodetic Science degree from the Ohio State University (OSU) and Master's degree in Civil Engineering from the Indian Institute of Technology (IIT), Kanpur, India. He was Associate Professor at Ferris State University and Penn State University where he taught courses in Civil Engineering and Surveying Engineering and conducted his research. During his academic and research career, he has contributed to several journals and conference publications. He is a registered licensed Professional Surveyor (PS), Professional Engineer (PE), Certified Photogrammetrist, Certified GIS Professional, and FAA Part 107 certified UAV pilot.