

A new Bimonthly seminar series from the Department of Civil and Environmental Engineering (CEE), focusing on convergent research, bringing together Northeastern colleagues and collaborators to think big/bold, explore ideas that build cooperation and foster transformative innovation within CEE and across disciplines beyond CEE.



Ming Wang COE Distinguished Professor, Civil and Environmental Engineering, Northeastern University; PI & Director, VOTERS



**Salar Shahini** Chief Technology Officer for StreetScan & Streetlogix

## Friday

March 26, 2021

12pm-1pm

**Teams Meeting** 

## Revolutionizing Smart City Infrastructure Management using AI and GIS

From a Research Project to Startup

In 2009, Northeastern University received a grant to develop a new pavement inspection method. An interdisciplinary team of engineering students and faculty came together to create a system that would allow cities to constantly monitor their roadway conditions within a GIS framework. With backgrounds from Electrical Engineering, Computer Science, Civil Engineering, and Geomatics, the research group developed a mobile sensor system. When mounted on a vehicle, this system is capable of detecting road defects while roaming in traffic. Results are provided in a secure GIS web-based application along with maintenance and budget planning tools to allow decision-makers implement proactive maintenance. The research project concluded in 2016, and the key creators formed the university spin-off company, StreetScan and rebranded the software as Streetlogix.

Once a research project, StreetScan & Streetlogix are being used in over 200 municipalities in 27 states & three countries and rapidly expanding. The scanning and software system have since grown their capabilities into also assessing sidewalks and right-of-way assets such as street signs. StreetScan and StreetLogix combined have 25 full time and 21 part time employees. This talk will discuss the StreetScan & Streetlogix technologies as well as challenges that were involved into transforming a research idea to a real-world solution.