



**ONTARIO CHAPTER**  
Tunnelling Association of Canada  
Association Canadienne Des Tunnels

## INVITATION

### Instrumentation Technologies & Cutting Edge Monitoring Solutions

**Presenters:** James Saunders & Jessica Abrahamse, Sixense

**Date & Time:** Wednesday, May 29, 2019  
Doors and registration: 5:30pm  
Presentation: 6:00pm

**Location:** Lone Star Texas Grill  
930 Dixon Rd, Toronto, Ontario

**Cost:** TAC Members: \$5 at the Door  
Non-Members: \$10 at the Door  
Government Employees: \$5 at the Door

**RSVP:** It isn't required to RSVP, but please notify [onttac@gmail.com](mailto:onttac@gmail.com) if you plan to attend.



### Presentation Overview

This presentation will briefly describe state of the art instrumentation technologies implemented for urban underground construction projects. There will be a special focus on examples of cutting edge monitoring solutions deployed recently for major iconic urban tunneling projects, such as the Automatic Motorized Total Stations (AMTS), the INterferometric Synthetic Aperture Radar (INSAR) and source less seismic (SLS). These innovations will be presented through SIXENSE case studies, including: the NZLijn metro in Amsterdam (NL), the Alaskan Way tunnel in Seattle (WA), Le Grand Paris Express (FR) and Crossrail in London (UK).

The presenters will also share their view on the good practices for the planning, design, deployment and maintenance of such monitoring programs.

### Speaker Bios:

#### James Saunders & Jessica Abrahamse



James Saunders studied Civil Engineering at Queen's University. Following graduation, he pursued innovative IoT solutions for geotechnical and mining industries. Alongside ConeTec, he founded VEGA which developed, managed and deployed proprietary integrated data solutions for mining and geotechnical clients across North and South America.

James joined SIXENSE in 2018 as Business Development Manager, establishing the Vancouver, Canada office.



Jessica Abrahamse has obtained a Masters degree from York University in Toronto in Environmental Studies. She has spent time in her career developing new business for proprietary reinforced soil structures, in diverse sectors such as transportation, mining and municipal across Canada. Recently in September 2018 Jessica joined SIXENSE as the Marketing and Business Development Manager based out of Oakville, Ontario.