Transforming Construction with Reality Capture Technologies

The Digital Reality of Tomorrow | August 23-25, 2022

Fredericton, New Brunswick, Canada

Venue: Wu Conference Centre, University of New Brunswick (UNB)

UNB EST. 1785 UNIVERSITY OF NEW BRUNSWICK | Off-site Construction Research Centre

CSCE CCGC 1887 Canadian Society for Civil Engineering

TCRC 2022 TRANSFORMING CONSTRUCTION WITH REALITY CAPTURE TECHNOLOGIES

TCRC 2022 - Conference Call

TRANSFORMING CONSTRUCTION WITH REALITY CAPTURE TECHNOLOGIES

UNB Off-site Construction Research Centre

Canadian Society for Civil Engineering

Chairs

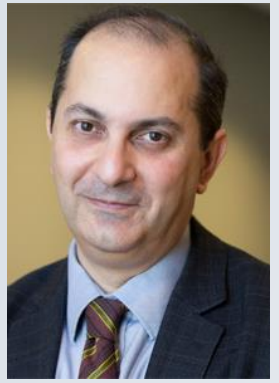
Brandon Searle, P. Eng., M. Eng.
Chair, Organizing Committee

Ala Suliman, PhD., P. Eng.
Chair, Technical Committee

Keynote Speakers

Prof. Ioannis Brilakis,
University of Cambridge

Prof. Carl Haas,
University of Waterloo



Prof. Amin Hammad,
Concordia University

Prof. Zheng Liu,
University of British Colombia

Dr. Gunho Sohn,
York University

POMERLEAU

Boston Dynamics

Pomerleau R&D lab

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"Reality Capture Technologies in the Built Environment"

The specialty conference theme is Reality Capture Technologies in the Built Environment, with the focus on applications being used to enhance existing processes and inform better decisions for planning, building, operating, and maintaining the built environment. The range of the topics include:

- ❑ Image/video processing, laser/LiDAR scanning
- ❑ Scan-to-BIM and point-cloud processing
- ❑ Radar/GPR sensors, ID/information sensors, position sensors
- ❑ Surveying, remote sensing, visual documentation and as-is modelling
- ❑ Integration of reality capture with modern technologies (i.e., 3D Printing, Robotics, Digital twins, Augmented/virtual/mixed reality, UAVs, Virtual Design and Construction (VDC), Digital fabrication, etc.)
- ❑ AI/machine learning & cloud/edge computing for data processing

TCRC 2022 - Conference Streams

TRANSFORMING CONSTRUCTION WITH REALITY CAPTURE TECHNOLOGIES

The specialty conference will feature:

- ✓ Presentations of peer-reviewed academic papers
- ✓ Presentation case studies by industry practitioners
- ✓ Plenary sessions & engaging keynote speakers
- ✓ Industry workshops
- ✓ 5-min student competition

- ✓ **Innovation Pitch Stream by industry & research labs**:

It is an exclusive chance for industry and government sectors to share, through live presentations, their challenges, problems, and objectives. It is also an opportunity for applied research labs worldwide to showcase their previous projects and highlight their innovative strategies, roadmaps, and research directions for a better tomorrow. Our goal is to create a market for remote capture innovation by connecting those with related problems with those with solutions.

Important Dates

TRANSFORMING CONSTRUCTION WITH REALITY CAPTURE TECHNOLOGIES

	April 29	May 6	June 10	July 15	August 5	August 22
Academic Papers	Abstract (optional)	Abstract acceptance	Full paper submission	Full paper acceptance	Final paper	-
Case Study Presentation	Abstract (optional)	Abstract acceptance	Extended abstract	Ext. abstract acceptance	Presentation slides (optional)	-
Workshop Proposal	Workshop proposal	Workshop selection	Registration opens	Registration deadline	-	Workshop delivery
Innovation Pitch	Notice of interest (NOI)	NOI acceptance	Submission deadline	Final acceptance	-	-

Conference Dates: August 23-25, 2022

Website:

URL: https://www.unb.ca/ocrc/events/reality-capture/index.html

Join us in Fredericton, NB, Canada