

CanSLAM Circuit



2024



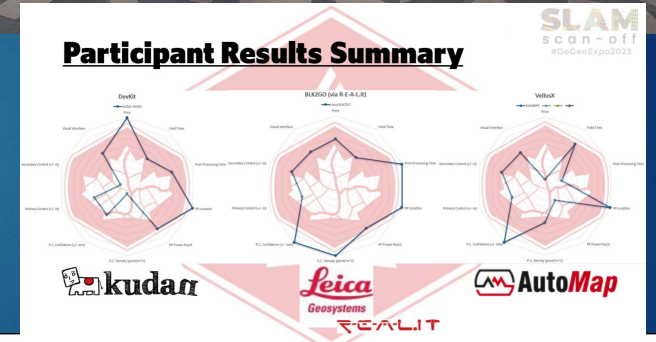
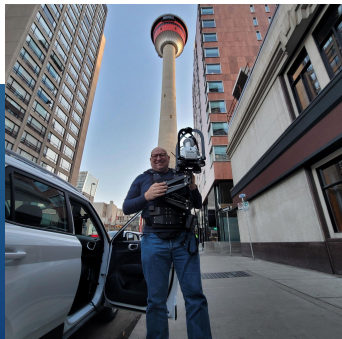
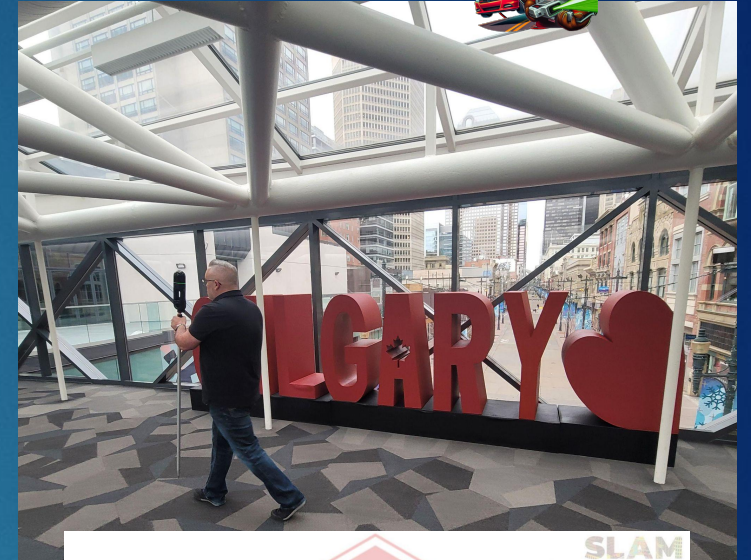
SLAMSO23



SLAM

scan-off

#GoGeoExpo2023



Modern Industry Pains



- *Understaffed*
- *Under-experienced*
- *Complex work = slow work*
- *Confusion = Incidents*
- *Short turnaround times*
- *High liability, inefficient system*
- *Undocumented = uncontrolled*

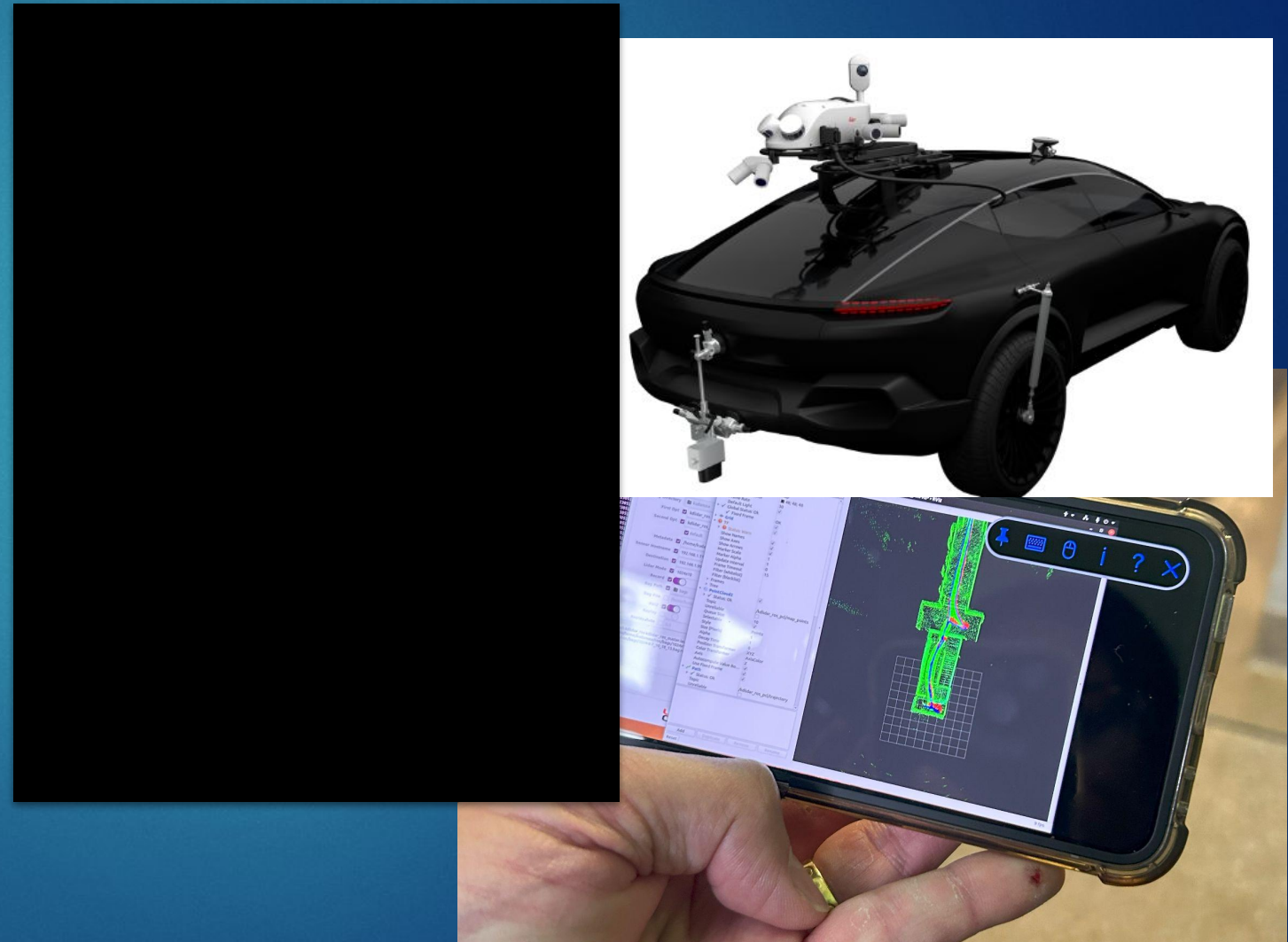


An Emerging Technology



Simultaneous Localization and Mapping (SLAM)

- *Fast*
- *Accurate*
- *Comprehensive*
- *Simple*



An Emerging Impact

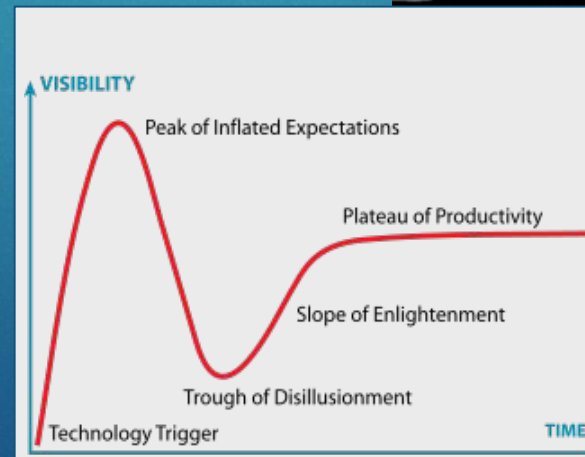
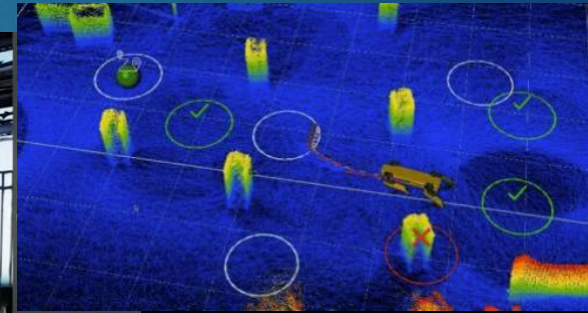
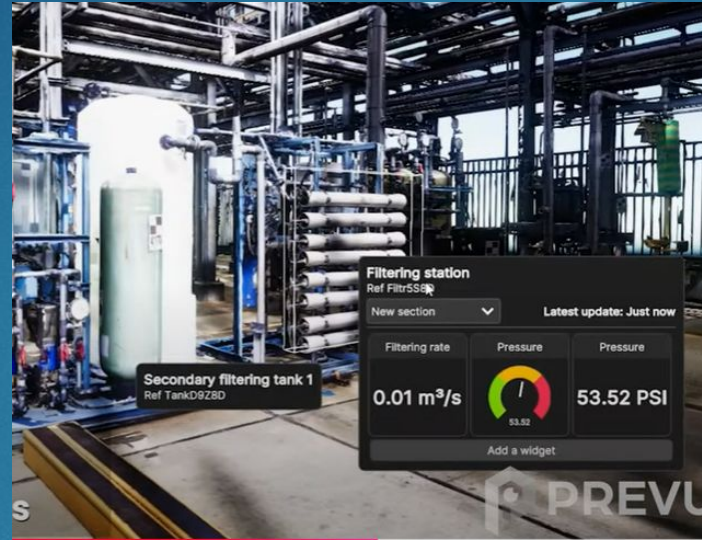


- Urban planning
 - Construction
 - Environmental Analysis
 - Transportation & Logistics
 - Mining
 - Energy & Utility
 - Preservation
 - Gaming
- 
- Look & Measure
 - Drafting & Take-off
 - Modeling & Simulation
 - Progress Documentation
 - Shareholder / Milestone Reporting
 - Virtual & Mixed Reality Scenes

An Emerging Technology



- **Fast**
- **Accurate****
- **Comprehensive**
- **Simple****
- **Powerful**
- **Under-Utilized yet massive RoI!**
- **'Gamification' imminent**



Local Viewer

LCC Studio

Local Viewing

Publish Online

XGRIDS Space

Share Online

Model Export

UNREAL ENGINE

Unity

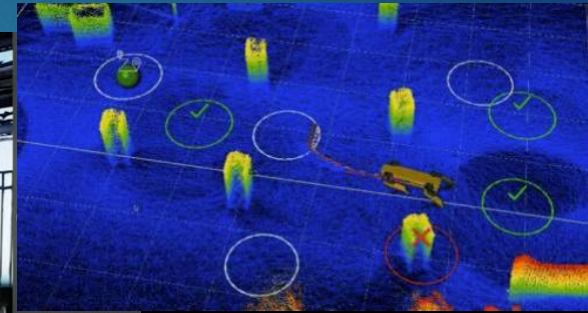
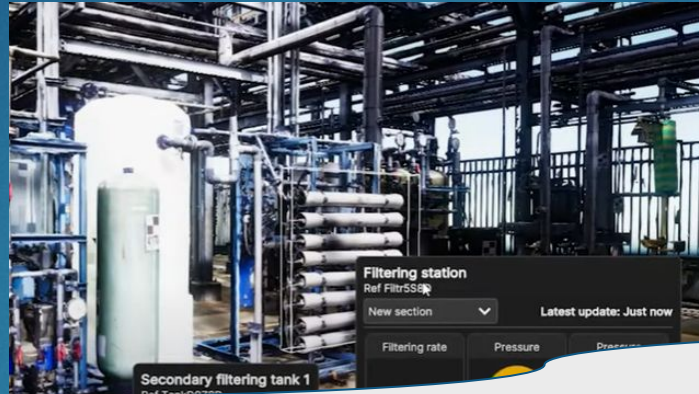
SDK and plugins

Further R&D

An Emerging Technology



- **Fast**
- **Accurate****



‘...can replace most terrestrial scanning applications...’

- **Powerful**
- **Under-Utilized yet massive RoI!**
- **‘Gamification’ imminent**



Publish Online

XGRIDS Space

Share Online

Model Export

UNREAL ENGINE

Unity

SDK and plugins

Further R&D

Unmonitored, Unguided Growth



- Dozens of companies, dozens of platforms
- SLAMs & MMs similar but unique?
- Internet searches ineffective / inefficient
- No standard performance metric
- Misunderstood (?):
 - GCPs
 - GNSS
 - DMIs
 - Alignment techniques
- Rapid yet hampered A.I. development
- HUGE costs associated with learning & adopting



30+ Unique Manufacturers



30+ Unique Manufacturers

71 Platforms



3



1*



1*



1



4



3



1



5



1



1



2



1



1



4



3



3



2



2



2



1



1



2



2



7*



1



2



1



4*



4



4



1

CanSLAM Circuit



2024



Goals of the CanSLAM Circuit



1. Introduce Canadian industry to SLAM manufacturers
 2. Encourage discussion of adoption and application
 3. Introduce considerations of adoption
 4. Provide Free base data sets for consideration
 5. Bring SLAM manufacturers together
 6. Promote downstream A.I. Integration
- ▶ A resource, not a (direct) competition



Establish a Course



Jesse Vanneste, P. Eng., ALS

✓ • 2nd

Technical Lead, Geomatics
Calgary, AB



**FORTRESS
GEOMATICS LTD**



lance hummel, CST ✓ • 1st

Geomatics Instructor at SAIT Polytechnic
Calgary, AB



Victoria Desjardins • 1st

Geospatial professional with a keen interest in...
Calgary, AB



Ricky Mendoza ✓ • 1st

Calgary, AB



Janice C. ✓ • 2nd

Geomatic Engineering Technology student at SAIT
Calgary, AB



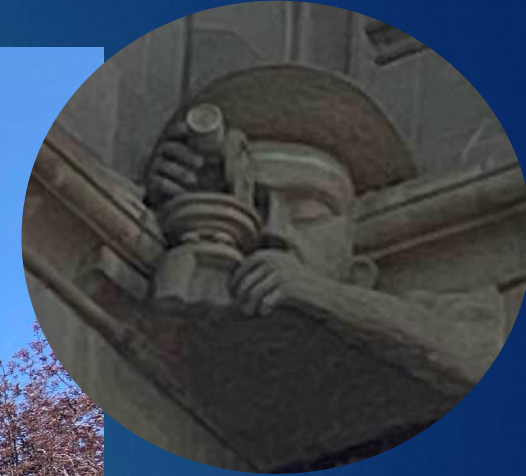
Eunice Estonactoc ✓ • 1st

Mining Engineer (Ph)
Canada



Chimezie Azih ✓ • 1st

3D Reality Capture - Tech Sales || Enthusiast for...
Surrey, BC




Establish a Course



 **Jesse Vanneste, P. Eng., ALS**
• 2nd
Technical Lead, Geomatics
Calgary, AB




 **lance hummel, CST** • 1st
Geomatics Instructor at SAIT Polytechnic
Calgary, AB

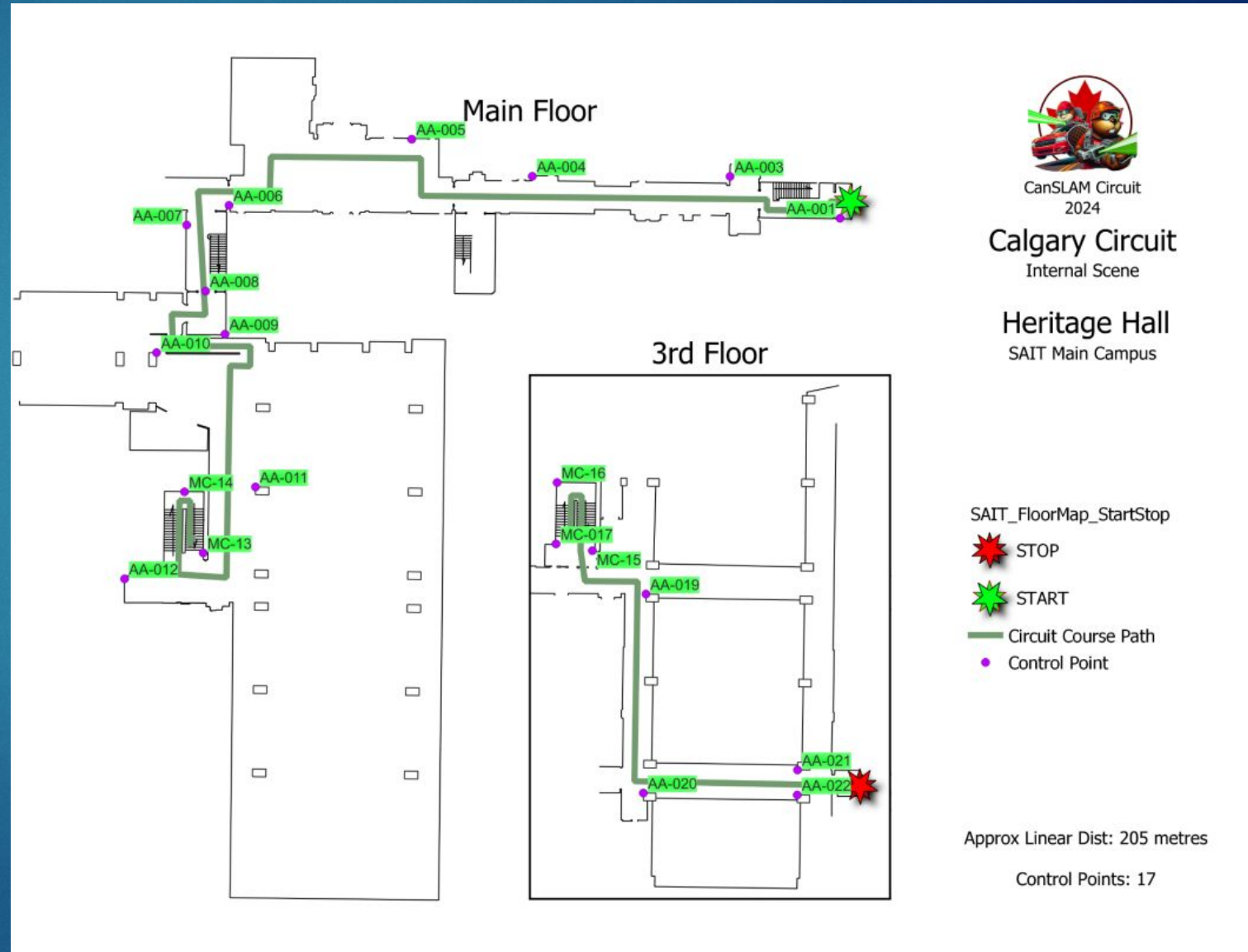
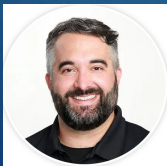
 **Ricky Mendoza** • 1st
Calgary, AB

 **Victoria Desjardins** • 1st
Geospatial professional with a keen interest in...
Calgary, AB

 **Janice C.** • 2nd
Geomatic Engineering Technology student at SAIT
Calgary, AB

 **Eunice Estonactoc** • 1st
Mining Engineer (Ph)
Canada

 **Chimezie Azih** • 1st
3D Reality Capture - Tech Sales || Enthusiast for...
Surrey, BC



Establish a Course

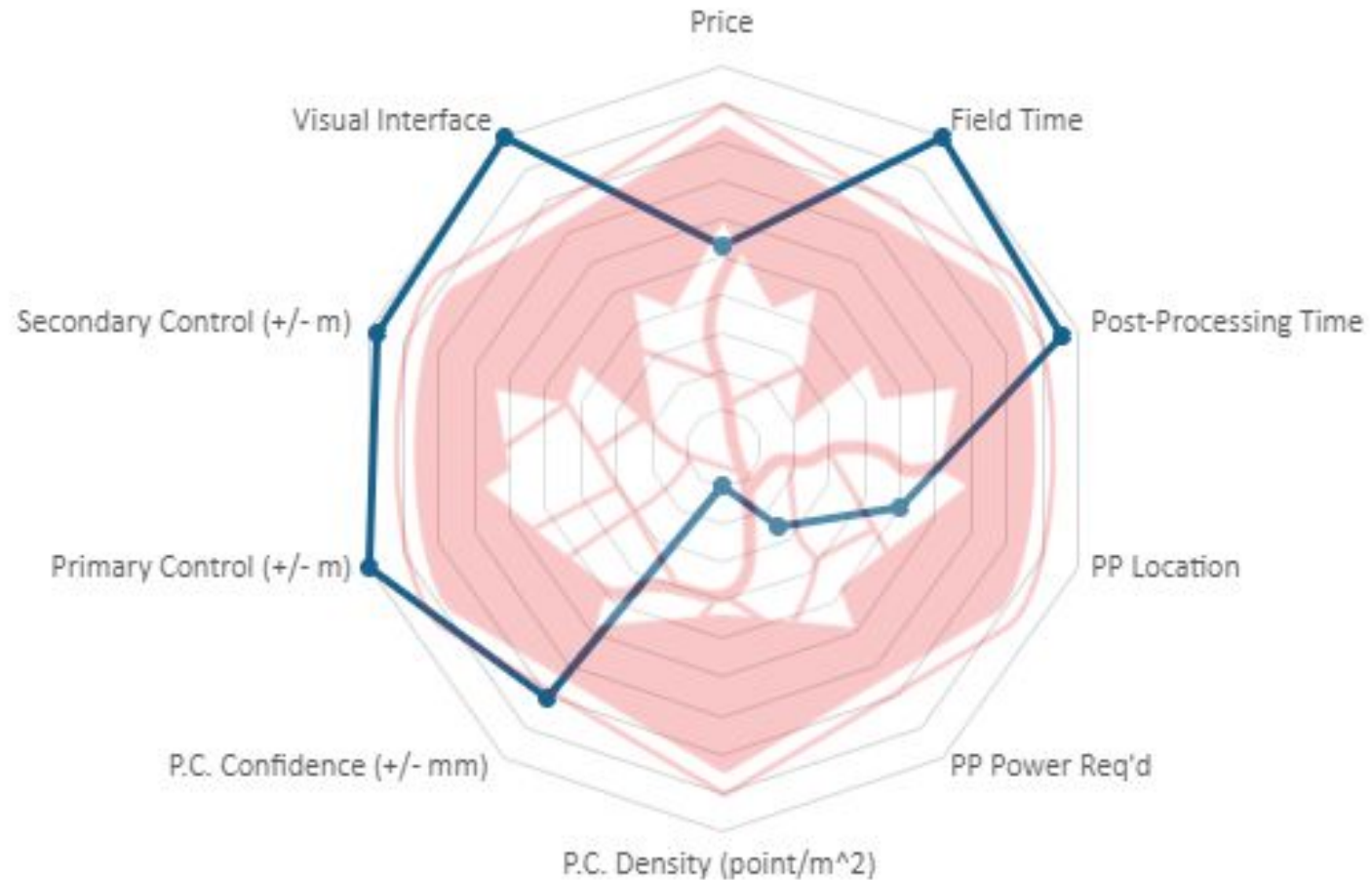


SLAMSO Evaluation Criteria

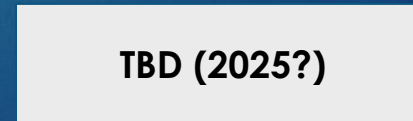
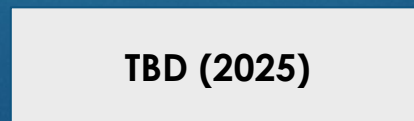


[Insert Manufacturer's Name]

[Insert Rep Company Name]



30+ Unique Manufacturers



CanSLAM 2025 Participants



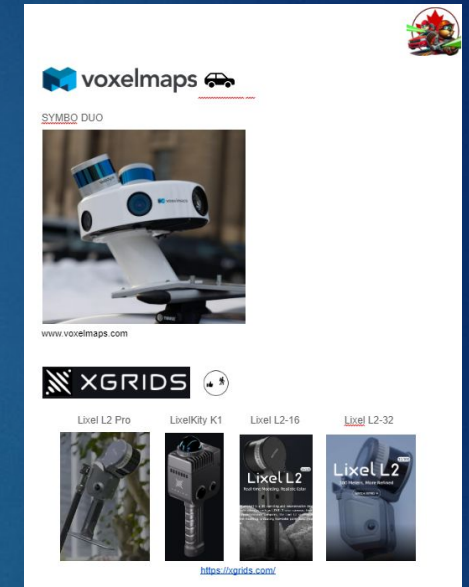
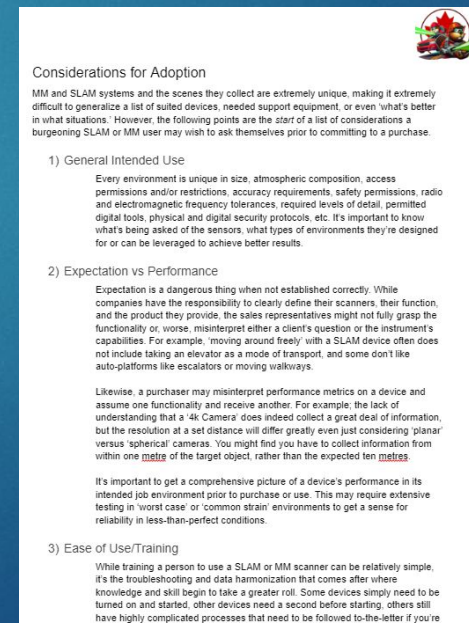
*Calling all scanners

CanSLAM 2025 Participants



Value Proven

1. Three you didn't know? Mission accomplished.
2. Increase negotiating position
3. CanSLAM exposes those interested and excited
4. Remote map creation
5. Report
6. Found confident SLAM partners
 - ▶ Building knowledge, Consumer confidence
7. Validation for New Market Entry
 - ▶ 2025 = 2 new companies



Community Call to Action



Making 'Sample Data' available is not 'transparency of performance.' It's putting your best foot forward.

Resources: Cloud storage, cloud analytics software, volunteer incentives/opportunities, targets, general financial sponsorship and/or involvement.

Manpower: Validation, maintenance, outreach, circuit admin, analytics, circuit design/hunting, report beautification



"We just have to wait for them to realize that these have value before we can get them involved."

Manufacturers Call to Action



Value to help with:
growth, income, and building customer relationships.

Help us build:

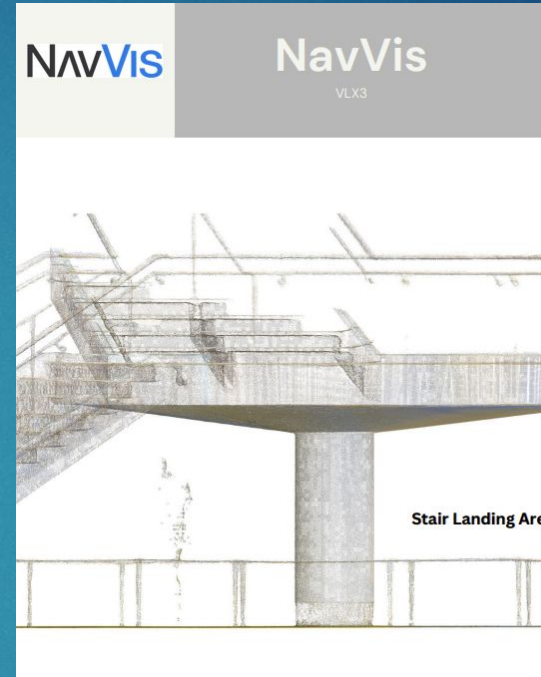
Consumer confidence (growth)

Customer

We want to see your data/product!



Geo Week 2024 Report



Stair Measurements F & G

- Distance measurements F and G at the two ends of the stair handrail post represent the point-to-point distances (approximately 33-36 feet) extracted from each point cloud dataset.

Stair F

Point-Point Measurements using Riegl as baseline (ft)

Point-Point Measurements using Average as baseline (ft)

Stair G

- The data are presented as distance deltas (in "feet") between each dataset and the average, as well as deltas between each dataset and the ground truth (Riegl) data. These are categorized into 2D (XY) deltas, elevation (Z) deltas, and 3D (XYZ) deltas separately.





THANK YOU!

