

GeoWorks Presents Geospatial Innovations At Innovfest Unbound 2019

Geospatial information and technology is a driver in the vision of a future intelligent market economy. Geospatial information has tremendous potential to transform services, streamline business processes and help companies gain competitive advantage with geospatial data analytics. Companies can leverage on the 'where' element in geospatial data to enhance the various stages of their business value chain.

GeoWorks was set up by the Singapore Land Authority (SLA) as an industry centre to galvanise the geospatial industry by connecting geospatial businesses, entrepreneurs as well as users and supporting them with the resources and expertise to catalyse geospatial innovation and solutions.

The GeoWorks showcase at Innovfest Unbound 2019 held at Marina Bay Sands Singapore from 27th and 28th June 2019 will feature geospatial technologies and applications from 16 GeoWorks GeoTechs and GeoPartners that range from drone, air taxis, mapping and GPS/location-based technologies; geospatial data visualisation and analytics; remote sensing; autonomous vehicles; artificial intelligence, Internet of Things, Virtual/Augmented Reality and more.

Key highlights at the GeoWorks showcase:

- Air taxis, drone technology and solutions by GeoTechs Volocopter, Skyports, Airmap and Garuda Robotics.
- Satellite imaging with Synthetic Aperture Radar (SAR) system for urban development assessment and analysis by GeoTech Synspective, a Japanese satellite company. Compared with optical imaging, SAR is able to penetrate cloud cover and to acquire high resolution images even during nighttime.

- Augmented Reality and Virtual Reality bicycle route simulation by GeoPartner PTV Group to showcase the travel behaviour of pedestrians and vehicles on the street with the use of virtual environment, traffic microsimulation and a game engine.
- Mobile map scanning technologies via a handheld device integrated with Augmented Reality (AR) technology by GeoPartner Trimble.

SLA Geospatial and Data Director and Chief Data Officer Ng Siau Yong said that since the inception of Geoworks in July last year, GeoWorks has hosted 25 geospatial entrepreneurs, both local and international, and matched them with the resources from industry partners to scale up their service and reach in Singapore and beyond.

“Our presence at Innovfest Unbound is intended to showcase the rapid growth and acceptance of geospatial technologies by enterprises and the community at large. In tandem, we hope to encourage more creative entrepreneurs to enter this space, as they help us expand our nation’s Smart City development through geospatial information science and technology,” said Mr Ng.

Quotes from GeoWorks GeoTechs

Volocopter Head of Strategic Expansion Peter Littau said “GeoWorks is strategically placed in Singapore as a gateway to the Southeast Asian region. As a GeoTech, we highly appreciate the great support and connectivity GeoWorks offers with business partners and the relevant high-tech startups in the field of future mobility.”

"Using data and geospatial technology, MOGUL.sg, a GeoWorks GeoTech, has engineered an intelligent platform that re-indexes the map with amenities verified by multiple government agencies. This allows users to search for properties based on keywords hence moving away from the conventional means of searching and yielding more relevant search results due to the smart matching system powered by AI," said Gerald Sim, Founder, MOGUL.sg.

For media enquiries, please contact:

Cheryl Lim
Senior Manager
Corporate Communications
Tel: 6478 3424
Email: Cheryl_lim@sla.gov.sg

About GeoWorks

GeoWorks is the first geospatial industry centre in Southeast Asia. It was set up by SLA to promote business growth, drive innovation, and enable a well-connected community in Geospatial Information and Technology. Under the GeoWorks GeoInnovation programme, GeoWorks currently houses over 25 local and international geospatial start-ups and scale-ups from different industry segments within its facility. GeoWorks also runs regular training sessions, partner and community events. GeoWorks' key initiatives include GeoChallenges that match solution providers with sector users looking to solve their geospatial issues; joint innovation projects; OneMap and data licensing.

For updates and more information, visit www.geoworks.sg.

About SLA

Singapore Land Authority (SLA) is a statutory board with the Ministry of Law. Its mission is to optimise land resources for the social and economic development of Singapore. SLA manages some 11,000 hectares of State land and about 5,000 State properties, which have largely been tenanted out for a variety of uses. It also manages land sales, leases, acquisitions and allocation, developing and marketing land-related information, and maintaining the national land information database through digitised land information services. Being the national land registration authority for property transactions, SLA issues and guarantees land titles in Singapore. It also manages and maintains the national land survey system, where boundaries or legal limits of properties are defined, based on a coordinated cadastre survey system. The use of geospatial information is also spearheaded by SLA through a national collaborative environment where geospatial data, policies and technologies are established and defined, thereby fostering innovation, knowledge and value creation for the Government, enterprises and community.

For more details, visit www.sla.gov.sg or find us on Facebook and Instagram @SingaporeLandAuthority.

Annex A – GeoSpatial Presentation Highlights at Innovfest Unbound 2019

27th June, Innovfest Unbound

Panel – Future of Mobility (Main Stage)

10:45 am - 11.15 am

Electric cars are now more advanced than traditional gasoline cars in every feature. With the development of AI, ML, processing powers and advanced sensors the autonomous driving has made the integration into the electric cars. However, the future of transport is more than just self-driving cars - it talks to the very infrastructure all around us, modes of transport, and must consider more than just roads and cars.

Moderator:

Rich Preston, Senior Journalist, BBC

Panellists:

Low Kahoe, Chief Strategy Officer, ST Engineering

Yann Marteil, Executive Chairman, Via ID

Peter Littau, Head of Strategic Expansion, Volocopter (a GeoWorks GeoTech)

GeoWorks Geospatial Tech Workshop

12:00 pm – 13:00 pm

Geospatial: Now for the Future (Fleming Stage)

Innovation in the geospatial industry is rapidly burgeoning across the world, from the US to Europe to Asia-Pacific. Many organisations from around the world are using Singapore as their gateway into Southeast Asia, and with them, entrepreneurs bring their differentiated innovation experiences together. Listen to their journey from inception to development.

12:05 Keynote by Volocopter

12:10 Panel – Meet the GeoWorks GeoTechs!

Peter Littau, Head of Strategic Expansion, Volocopter (Germany)

Ayush Singhal, Business Operations Manager, Airmap (USA)

Jesslyn Wong, VP, Global Business Development, Synspective (Japan)

Sangeetha Banner, Business Development GeoSpock (UK)

Gerald Sim, Founder, MOGUL.sg (Singapore)

12:40 Geospatial business use case by Gerald Sim, Founder, MOGUL.sg (a GeoWorks GeoTech)

“How MOGUL.sg utilised geospatial tech to disrupt to become Singapore’s Smartest Property portal”

Panel – Global Smart Cities (Main Stage)

14:15 pm – 14:50 pm

New technologies are emerging to help build cities that are prepared for sustainable development, population growth and widespread internet access. Such developments address some of the most fundamental problems in urban geography such as housing, infrastructure, traffic, overcrowding, support of increasing population growth and sustainable living for future generations. If used effectively, data and digital tools can provide smart solutions to problems as we head towards the advent of smart cities.

Moderator:

Professor Chan Heng Chee, Ambassador-at-Large, Ministry of Foreign Affairs

Panellists:

Bruno Lanvin, President, Smart City Observatory

Sree Kumar, Adjunct Senior Fellow, Lee Kuan Yew Centre for Innovative Cities

Tan Boon Khai, Chief Executive, Singapore Land Authority

Derek Tan, Executive Director, Engineering and Professional Services, Asia Pacific, SenseTime

GeoTechs exhibiting at GeoWorks Showcase (R11)

Air taxi, drone and space technology

VOLOCOPTER

Volocopter (Germany) is building the first manned, fully electric and safe drone air taxi fleet/electrical vertical take-off and landing multi-copters (eVTOL)vtol in the world. It wants to make humanity's dream of flying come true and help modern cities resolve their increasing mobility issues



Garuda Robotics (Singapore) is a developer of enterprise-grade drone and drone data solutions for enterprises, governments, and professional drone operators. Its products and services are deployed in the agriculture, infrastructure, security, and logistics industries throughout Asia to capture, analyse and leverage aerial data at scale.

Demo: Drone flight control system for BVLOS operations in security and delivery applications.



AirMap (USA) is the leading global provider of aeronautical data & services to unmanned aircraft, or drones. They help to maintain situational awareness, request digital authorisation, get traffic alerts, and more.

Demo: Live demonstration on how drone flight planning and authorisations can be fully automated and reduce the lead time to get permissions from a few weeks to a few seconds.



Skyports (UK) is the first in the market in securing, designing, building and owning passenger and cargo vertiports in the world's major cities. They help to connect the world through the skies by owning and operating infrastructure for urban aviation and managing drone deliveries, reducing inefficiencies associated with traditional transportation methods.

Demo: Showcasing vertiport designs of its first vertiport, modular infrastructure concept and integration of air taxis into urban environments.



Synspective (Japan) is a one-stop geospatial solutions provider for solution services with satellite data, and the development and operation of SAR satellites. Having their own satellites and advanced analysis technology allow them to respond to new customer requirements quickly, provide clients with user-friendly information and engage in reliable data acquisition.

Demo: Objective monitoring with SAR images to accomplish efficient, accountable and resilience world such as construction monitoring, urban development assessment and subsidence monitoring.



The Singapore Space and Technology Association (SSTA) focuses on developing Singapore's Space and related high technology industries. They spearhead major trade and business-focused initiatives targeted at advancing the space ecosystem, host global meets and organise outreach programmes that support the discovery and exploration of space-related activities.

Demo: Showcasing programmes and activities organised by SSTA such as Asia's case for business as well as opportunities and the startup scene in the space industry.



Singapore GeoTech startups highlights

MOGUL.sg is Singapore's first major and smartest property portal which helps home seekers in Singapore to find their dream home easily. Diverging from traditional search engines with few search parameters, MOGUL.sg utilise a keyword-based search system with an in-built AI that push for personalized recommendations and a customer-keyword database of over 5000 (and growing) words describing characteristics of properties.

Demo: Displaying video on fueling the property search through cutting-edge AI technology and geospatial data.



PTGEM is a Singaporean company developing 3D web geolocalised IoT visualizations. They focus on building the most natural visualisation solution for complex IoT projects and making sure their application brings the physical space encompassing your business into the digital world.

Demo: Live demonstration on one building with 3D indoor floor-plan visualized and IoT devices connected and visualized.

Other GeoTechs



GeoSpock® provides analytics and enables prediction across space and time. Their leading database technology, optimised for cloud architecture, allows for the rapid ingestion, indexing and querying of geospatial big data. As a provider of high performance, low-cost cloud-based services such as infin8™ and illumin8™, GeoSpock can handle trillions of data within seconds for their clients.

Demo: Data visualisation and exploration tool illumin8™, which is able to handle petabyte scale datasets on the fly.



Schoolber Technologies provides Location Intelligence and Geospatial Analytics to Data. They empower companies with better Data Visualisation, Data Collection (IoT & Sensors), Data Mobility, Data Security and Data Privacy. Additionally, they have developed powerful and low-cost Ecosystem SaaS platform for companies looking to go digital at affordable rates.

Demo: Showcasing from request to acceptance, to location of the vehicle through the whole journey on the dashboard.



Ent-Vision is a Tech Start-up specialised in AI & GeoSpatial solution for logistic & transportation industry. Building from ground up with a solid quality data foundation, Ent-Vision uses AI, ML, NLP, coupled with proprietary data clustering algorithms to help enterprises optimise logistic resources and minimise operating costs.

Demo: AI Driven Urban Logistic Consolidation for Car-lite City aims to resolve the issues by creating an Urban Logistic Consolidation Hub, a collaborative network connecting various logistic service providers to consolidate logistic tasks and optimise transport resources.



GeoDEX, a data exchange platform that connects People, Assets, Processes & Data by Location, to empower decision-makers in organisations with operational intelligence so that they can See, Know and Act on everything that matters.

Demo: Using Geospatial Tech to enhance business operations.



Equinox is Ongil's location intelligent platform that provides location specific insights which enable organisations to define paradigm shifting revenue growth strategies and drive operational efficiency. To accomplish this, they have built a smart data pipeline that automatically cleanses data, fluid UI that makes exploratory data

analysis powerful and algorithms that think.

Demo: Showcasing Equinox with an interactive demo on use cases across sectors (supply chain, banking and retail) and how the platform can automatically derive insights.

GeoPartners



Trimble is transforming industries around the world by delivering products and services that connect the physical and digital worlds. Core technologies in positioning, modeling, connectivity and data analytics enable customers to improve productivity, quality, safety and sustainability.

Demo: Showcasing SX10 – Combination of a total station and 3D scanner technology as well as SiteVision – Integration of both GNSS and Augmented Reality(AR).



the mind of movement

PTV Group takes a holistic approach that integrates all facets of traffic, transport and logistics to create and promote sustainable mobility. As global market leader, PTV develops intelligent software solutions for transport logistics, traffic planning and traffic management enabling people and goods to arrive safely and promptly at their destinations while ensuring sustainability.

Demo: Showcasing travel behaviour of pedestrians and vehicles on the street with the use of virtual environment, traffic microsimulation and a game engine.



Grab is Southeast Asia's leading super app that provides everyday services that matter the most to consumers. Through its open platform strategy, Grab works with partners to provide safe, accessible and affordable transport, food, package, grocery delivery, mobile payments and financial services to millions of Southeast Asians

Demo: Displaying real-time movement of Grab rides across the top cities, their community programs and AI for SEA program.