

## **GEOVIXEL: the future of mobile mapping for XD digital infrastructure**

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### **Abstract**

Geovixel™ is a game changer in mobile mapping business and digitization of Urban areas. Geovixel™ is a new mapping concept for XD digital infrastructure for Virtual/Augmented reality, Self-Driving Cars, VBN and more. In the last decades, significant developments have been done in the Lidar mobile mapping system and much less focus was given to imaging systems. Geovixel™ will open the door of end user to start producing their own data through an interactive platform that relies on imagery as a front end and Lidar for adding indirectly the depth information. General discussion about the Geovixel™ system in specific, the state of the art of the METI work progress and the future of mobile mapping in general will be presented.

### **Biography:**

Dr. Mohamed Elhabiby

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Executive Vice president and co-founder of Micro Engineering Group, high-tech international group of companies, specialized in High Precision Engineering and Digital Information Engineering Infrastructure, located at Calgary, Alberta. He is an Associate Professor at Faculty of Engineering, Ain Shams University, Cairo, Egypt. Dr. Elhabiby led Micro Engineering Tech Inc to be finalist for Alberta Business Awards of Distinction 2017 (<http://abbusinessawards.com/2017-alberta-business-awards-of-distinction-finalist/>). He led Micro Engineering Tech Inc. to win Alberta Science and Technology Foundation Award in Applied technology 2015 (<http://astech.ca/awardee0/2015-applied-technology-micro-engineering-tech-inc>). Dr. Elhabiby is named by Avenue Magazine as one of Top 40 under 40 2013 (<http://www.avenuecalgary.com/top-40-under-40/mohamed-elhabiby>).

Dr. Elhabiby was the Chair of WG 4.1.4: Imaging Techniques, Sub-Commission 4.1: Alternatives and Backups to GNSS for four years. He chaired the Geocomputations and Cyber infrastructure oral session at the Canadian Geophysical Union annual meeting for five consecutive years (2008 – 2012). He was the Treasure of the Geodesy Section at the Canadian Geophysical Union for six years (2008-2014) and he is a leader of an Archaeological Mission at the Area of Great Pyramids, Cairo, Egypt. Dr. Elhabiby published more than 100 academic journals, conference presentations, book Chapters, workshop proceedings and technical reports.

