

RESEARCH SEMINAR

DEPARTMENT OF GEOGRAPHY & RESOURCE MANAGEMENT
THE CHINESE UNIVERSITY OF HONG KONG

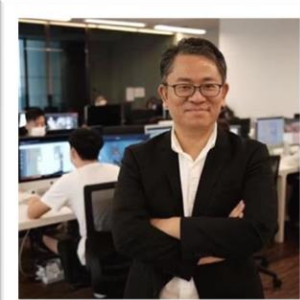
New Generation of Location-based Infrastructure for Smart City and Industrial Applications Based on Indoor Mapping, Positioning and Geospatial Intelligence

18 April 2024 (Thu)
4:30 – 6:00 pm (UTC+8)
Rm 221, Chen Kou Ben Building, CUHK

The indoor-based services market is a relatively new and untapped industry projected to reach a market size of \$55 billion by 2030. However, this market faces significant challenges due to the lack of digital infrastructure necessary for the seamless creation of mapping and positioning systems. These systems are essential for both end users and businesses utilizing indoor spaces. Compounding the issue is the limited access to Wi-Fi APIs by dominant mobile digital platforms such as Apple's iOS and the Android operating system. As a result, current indoor navigation solutions are restricted in scale and come with exorbitant costs when deployed in real-world applications. At Mapxus, we are a leading global indoor map platform that addresses these challenges. We have developed our proprietary indoor data and mapping software, as well as indoor positioning and navigation systems. Our solutions cater to iOS, Android web applications, IoT applications, and leverage our hardware infrastructure-free geospatial artificial intelligence technologies. This disruptive approach revolutionizes the traditional mapping processes, enabling easy updates of widespread and dynamic map information. Mapxus collaborates with ecosystem partners, including Apple Maps and Kawasaki Heavy Industries of Japan, to bring new indoor applications to the public. These applications encompass location-based promotion and business analytics, location-based safety tracking, and advancements in robotics and barrier-free navigation. By leveraging our technologies and partnerships, we aim to make these innovative indoor applications widely accessible and beneficial to all.

John Chuen-yu Chan CEO of Maphive Technology Group

Dr. John Chuen-yu Chan is a serial entrepreneur and the founder and current CEO of Maphive Technology Group (Mapxus). Mapxus, is a global indoor Geo-Intelligent platform offering AI-based indoor map and navigation services, and location-based solutions for smart cities and industrial applications. Dr. Chan is leading Mapxus' team in a 15-year plan to provide indoor data and navigation services for Japan in collaboration with the leading Japanese corporation Kawasaki Heavy Industries. Dr. Chan is a scientist known for his research contributions in regional environmental change associated with atmospheric ozone and aerosol chemistry and physics in his early career. He is also an inventor with special interest in geospatial intelligence and their applications in industry in recent years. Dr. Chan has over 100 academic publications and patents with over 5,888 Google Scholar citations and H- Index of 45 (April 2023). Dr. Chan served as a "Hundred Talent Import Program" distinguished professor of Sun Yat-sen University (2006-2012). He served many sciences and technology advisory bodies in the national, provincial and city levels of China.



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