

Haytham Akah, Egyptian Space Agency (EgSA)

Title

Shaping Egypt's Space Future: EGSA's Strategic Vision, Technological Advancements and Strategic Initiatives

Abstract

The Egyptian Space Agency (EGSA) serves as Egypt's central hub for space science, technology, and innovation. This presentation provides a comprehensive overview of the agency's mission, strategic vision, and its expanding portfolio of programs in satellite development, advanced payload technologies, and regional cooperation. It highlights EGSA's commitment to innovation, sustainability, capacity building, and partnerships across Africa and internationally. Additionally, the presentation explores emerging focus areas, including artificial intelligence and the Space Internet of Things (SIoT), that position Egypt as an active and influential contributor within the global space community.

Photo



Biography

Dr. Haitham Akah is a scientist with over 25 years of experience in space science and technology. He earned his B.Sc. in Electronics and Communication Engineering from Ain Shams University in 1999, followed by an M.Sc. in OFDM Synchronization with Pulse Shaping in 2005 and a Ph.D. in OFDM Adaptive Pulse Shaping for Satellite Communication in 2010. He joined Egypt's space program in 2000 and is currently the Senior Director for Space System Development at the Egyptian Space Agency (EgSA), where he plays a key role in advancing the country's space capabilities.

Dr. Akah's expertise spans satellite technology, space-based navigation systems, synthetic aperture radar (SAR) systems, and satellite communication. He has made significant contributions to Egypt's space program, including his role as a Space Communication Engineer in the EgyptSat-1 mission, Chief Technical Officer for Egypt's CubeSat projects, and Deputy Project Manager for the EgyptSat-2 Earth observation satellite. He is also pioneering research in space-based navigation for precision agriculture and Space IoT.

Beyond his technical contributions, Dr. Akah is committed to strengthening Egypt's role in the global space community. He actively promotes STEM education, leading the technical development of Space-Key, a pioneering space education platform. His work reflects a dedication to leveraging space technology for sustainable development, national security, and scientific advancement.