Prof. Dr. Hesham ElDeeb

Professor at the Electronics Research Institute, Cairo – Egypt.

Keynote title: "Torath": Digitization & Harnessing AI capabilities to preserve Egypt's Heritage

Bio

Dr. Hesham is the former President of the Electronic Research Institute and the former President of New Cairo Technological University. He served as a member of the Specialist Presidential Committee for Education and Scientific Research. With over 70 publications, Dr. Hesham has made significant contributions to the fields of high-performance computing and information technology. He has also supervised more than 10 Master's and Ph.D. theses in these areas.

Throughout his career, Dr. Hesham has actively participated in numerous scientific endeavors, leading and contributing to over 20 national and international research projects, including those funded by the US-Egypt Joint Fund, the European Union, and various national research initiatives. Currently, he serves as an advisor to the Ministry of Communications and Information Technology (MCIT), where he oversees and leads multiple high-impact projects.

"Torath": Digitization & Harnessing AI capabilities to preserve Egypt's Heritage

Abstract:

The MCIT "Torath" Project is a pioneering effort to preserve Egypt's heritage and enrich Arabic digital content. Aiming to safeguard the nation's legacy for future generations, the project establishes the Egyptian Heritage Portal as a secure and trusted hub for content providers to publish, trade, and access a wide range of heritage content, such as newspapers, magazines, books, multimedia, visual arts, ...etc.

The initiative integrates cutting-edge technologies, including digitization, Arabic OCR, ontology development, and e-commerce, alongside AI-driven tools for smart contextual search, summarization, classification, translation, and named entity recognition. It serves academic institutions, government agencies, and international organizations, promoting the accessibility and usability of Arabic heritage content globally.

Collaborating with leading Heritage and academic institutions, "Torath" ensures authenticity and diversity, transforming the preservation and sharing of Egypt's heritage in the digital age.