



## **Dr. Ahmed N. Tantawy**

Senior Technology and Strategy Advisor

**Keynote title: The AI Revolution and the Role of Academia**

### **Bio**

Dr. Ahmed N. Tantawy is a lifelong learner, educator, engineer, inventor, scientist, and former senior business executive. He enjoys conceiving, planning, structuring, and managing innovation ecosystems, social business initiatives, and effective organizations that are centered around people and purpose.

Since 2013, Dr. Tantawy has been serving as an expert advisor to multinational corporations, the World Bank, the UN and various government agencies. He is currently a senior advisor to the Egyptian Minister of Communications and IT and the Founding Director of the Applied Innovation Center, where national challenges are addressed through the application and adaptation of emerging technologies. He is also a member of the Board of Directors of national-scale initiatives in the Middle East, a member of the Board of Directors of Telecom Egypt's Data Services company, and a Trustee of two Not-for-Profit Organizations working in the fields of Education and Sustainable Social Development of underprivileged communities. He was a member of the Board of Directors and the Executive Committee of the Egyptian National Telecommunications Regulatory Authority, a member of the Executive Committee for the Development of the Suez Canal Region, a senior advisor to various cabinet ministers, the Executive Director of an international Nanotechnology initiative, and a principal investment advisor of a Venture Capital fund operating in the US and the Middle East.

Dr. Tantawy held several technical and executive positions at IBM Corporation. From 2008 to 2013, he was Chief Technical Officer and Senior Executive Advisor in the Growth Markets Region, where he oversaw the company's mega-projects in Central and Eastern Europe, Central and South America, Africa, Asia, and Australasia. Between 1996 and 2008, he was the CTO of IBM's

Telecom and Media Industry Solutions Unit, directing Product Development Labs in the US, UK, Germany, Italy, Japan, Brazil, and Egypt. As CTO of the Internet Division, he conceived, raised significant funding, and spearheaded three interdisciplinary exploratory research programs across six IBM Research centers. He pioneered the introduction of secure digital content distribution as a viable business and introduced effective security mechanisms to support various business and public safety applications. He also built and led IBM's largest Software Services Delivery Hub, which developed advanced products and solutions for global clients. From 1988 to 1996, he was a Research Scientist and Manager at IBM's Thomas J. Watson Research Center in New York, pushing the frontiers of high bandwidth communications and high performance computers.

Dr. Tantawy has always been actively involved in academia. Between 1980 and 1988 he was a University Professor in the USA, France, and Saudi Arabia. He also held special oversight assignments with the US National Academy of Sciences and the Egyptian Supreme Council of Universities and served on the Boards of Trustees and Advisory Councils of a number of universities and research institutes around the world.

Dr. Tantawy's scientific contributions include 34 inventions, 4 books, 2 book chapters, and over 100 refereed papers. He was the Editor-in-Chief of a book series on High Performance Computers and Communications and an Editor of 4 scientific journals. He participated in the organization of over 50 IEEE, ACM, and IFIP conferences, serving as the General Chair of 14 among them.

His practical experience and interest areas include: Architecture and Design of Large Systems, High Performance Networks, Information Privacy, Data Security, Embedded Systems, Factory Floor Automation, Smart and Secure Cities and Buildings, Artificial Intelligence Applications, Nanotechnology Applications, Digital Transformation Strategies, and Tech-fueled Socio-Economic Growth Initiatives.

Dr. Tantawy holds a Ph.D. in Computer Engineering with highest honors from Grenoble, France and earned his B.Eng. and M.Sc. degrees in Electrical and Computer Engineering with distinction and highest honors from Alexandria University, Egypt. He attended advanced executive education programs in Business Administration, Corporate Governance, and Technology Management at Harvard, MIT, and IBM.

## **The AI Revolution and the Role of Academia**

### **Abstract:**

This presentation addresses the threats and opportunities that emerging technologies -and AI in particular- present. The impact of national development and socioeconomic evolution is

highlighted. Due to various specific parameters, Egypt is particularly vulnerable to the potentially massive disruption that AI has started to produce around the world. At the same time, and perhaps because of the same parameters, a proper strategy can give Egypt a significant opportunity to lead and prosper. Academia has significant role to play and a critical impact on the way in which AI and emerging technologies will ultimately impact the national economy, the job market, and the standard of living of all citizens.