

Presidential Address
23rd Symposium: “Artificial Intelligence”
Held on Saturday, March 26, 2022

Respected Speakers,
My dear fellow Engineers,
Honourable Guests,
Ladies and Gentlemen!

SALAMUN ALA MANIT-TABAUH-HUDA

I am extremely pleased to see you online.

Defending Pakistan in the AI Era is our prime objective. Participation in the technology competition is, therefore, imperative. Automatic Systems are being transformed to Autonomous Systems. The Software engineers of the future will, themselves, be software. AI is transforming the coding of computer programmes.

AI signifies the latest Technological Disruption. The world experienced in the past the disruption of industrial revolution, computing era and emergence of smartphone technology. When IBM began work to create Deep Blue in 1989, AI was in a funk. By the 2000s, the computer industry was evolving to make a neural net viable. By the early 2010s neural nets reached new heights. DeepMind's AI can control super-heated Plasma inside a fusion reactor, application of AI to hard science problems. DeepMind's AI predicts almost exactly when and where it is going to rain.

AI Global Market forecast for 2025 is US \$ 35.87B for Direct Revenue and US \$ 58.97B for Enabled Revenue. AI is clearly supercharging the future. Many organisations are already using AI internally in their day-to-day operations, in areas like cybersecurity, customer service, finance and manufacturing. Data is the fuel that powers AI. There are many challenges of implementing AI. Common pitfalls should be avoided. The desire for near-instantaneous decision-making is moving the AI to the edge. AI is learning how to create itself. The rapid development of AI that can train itself also raises questions about how will we can control its growth.

Google plans to integrate LaMDA into its main search portal in order to create a conversational interface that allows people to retrieve any kind of information-text, visual, audio-across all Google's products just by asking.

In the year 2021 the Chinese tech giant Huawei built a 200-billion-parameters language model called PanGu. The Beijing Academy of AI announced Wu Dao 2.0, which has 1.75 trillion parameters.

There is a wake-up call for the AI in drug discovery committee. An international security conference explored how artificial intelligence (AI) technologies for drug discovery could be misused for denovo design of biochemical weapons.

Running a healthcare system is like juggling bees. AI is helping treat healthcare as if it is a supply chain problem. The benefits of AI are concentrated in areas where data is available.

Ladies & Gentlemen!

The Pakistan Academy of Engineering took to itself to develop the Artificial Intelligence Strategy for Pakistan. Globally, about 42 AI experts of Pakistani origin were networked over the last six months as

PAE AI Vision Group. They have prepared a Plan for Making Pakistan a major player in AI Software and Services Export.

The Government of Pakistan issued “**National Security Policies of Pakistan 2022-2026**”. The Ministry of Information Technology & Telecommunication has moved “**Personal Data Protective Bill, 2020**” as consultation Draft. The National Assembly enacted the **National Information Technology Board Act, 2022**. The President of Pakistan made and promulgated the Ordinance “**Pakistan Ordinance on Artificial Intelligence (AI) 2021**”.

The intent of the Government to promote AI is visible. What we need is to develop expeditionary to centralise and manage the use of AI integrating the demands both for security of the country and economy of the nation.

Ladies & Gentlemen!

I sincerely hope you will enjoy to listen to our learned speakers on the very complex subject.

I thank Prof. Dr. Ali A. Minai, Prof. Dr. Junaid Ahmed Zubairi, and Prof Dr. Masood Mehmood Khan, who very kindly consulted to grace the event by bringing forth their considered views.

Thank you.