

Eng.Amr Khaled Emara

CS Operations Manager, Egypt
Advanced Magnet Engineer
Siemens Healthcare S.A.E
Tel:+202 333471029 / Mob:+20 1022235100
mail: amr.emara@siemens-healthineers.com

Artificial Intelligence

Transforming data into knowledge for better care

Siemens Healthineers has been involved in the field of machine learning since the 1990s. This is reflected by more than 400 patents in the field of machine learning, 80 patent applications in deep learning, and more than 30 AI-powered applications. As a leader in the field, we are expanding applications for Artificial intelligence (AI) beyond imaging to the lab and population health. We have invested in a dedicated advanced reading and annotation team and are building a database of more than 200 million curated images, reports, and clinical and operational data, which feed into and train algorithms.

Today, sufficient volumes of training data are available, including in the medical sector. The implementation of deep neuronal networks is now possible because computing capacities have also increased considerably. High-quality data is the fuel for continuously improving results. Over the course of the last few years, Siemens Healthineers has invested in a dedicated advanced reading and annotation team, building a database which now contains more than 100 million curated images, reports, and clinical and operational data which are fed into, and used to train, algorithms.

Artificial Intelligence is the enabler of digitalizing the healthcare. The content provides an overview of the current status, applications and challenges of AI. Its examples show how smart data, analyzed with AI, can support in cancer care and research, and facilitate collaboration between medical specialties for the sake of improved, more personalized and more targeted patient care.

We will focus on Siemens Healthineers 3 main areas of AI which strengthen our portfolio:

- Acquisition and Examination.
- Medical image Processing and Interpretation
- Guidance and Workflow assistance tools

AI is changing the way healthcare organizations operate to improve and transform care delivery, and Proactive Follow-up from Siemens Healthineers exemplifies that trend towards digitalizing healthcare, AI is key to realizing the transformation toward value-based healthcare. AI can help to make medical equipment smarter, imaging and lab results faster, and examinations more precise.

Finally we agree strongly that the purposeful use of Artificial Intelligence will benefit all healthcare stakeholders. We have to identify what data are really going to make a difference in expanding precision medicine, transforming care delivery and improving the patient experience and change the very nature of healthcare.