# U-Are Technologies Research Brief: Artificial Intelligence in Health Care.

LONDON, UNITED KINGDOM, October 31, 2018 /EINPresswire.com/ -- Scientists and researchers all over the world are very excited about advancements in innovation that have arisen from an innate desire to create newer and better technologies that facilitate mankind to extend beyond its own physical constraints. The promise of AI, once purely science fiction, promises much. Since its inception, AI has been deployed for highly selective defence or space exploration applications wherein its success has evolved around risk mitigation.
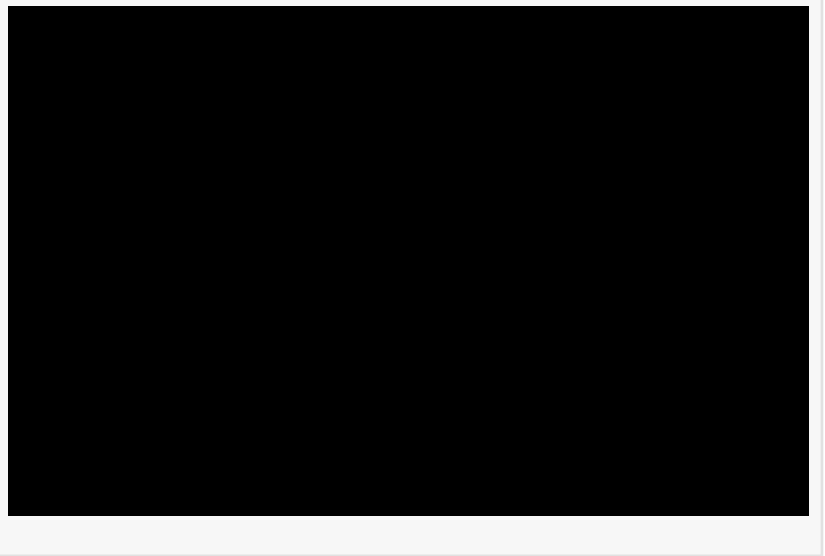
Many industries are about to be disrupted by this evolving technology. At U-Are Technologies, we are highlighting how AI can be applied to the healthcare industry through AI-based systems that allow for better diagnosis, cure and treatment of debilitating conditions.

Scope of AI in medicine

Increased integration of intelligent AI tools (along with AR and VR) in everyday medical applications could improve the efficiency of treatments and avoid costs by minimising the risks of false diagnosis, facilitate more targeted pre-operative planning, and reduce the risk of intra-operative complications.

The recent usage of AI in performing sophisticated tasks and computations has gradually led it to be introduced as a key component of MRI and computed tomography systems (CAT Scans). The added advantage of these systems is in the ability to effectively acquire information, and sync with established decision support databases such as those containing patent history. Further, AI has begun transforming the field of surgical robotics where it has enabled the advent of robots that perform semi-automated surgical tasks with increasing efficiency. As the technology matures, it is over coming one of the key challenges faced in robotics which is mimicking human body motion. In addition, recent advances in the field of AI such as neural networking, natural language processing, image recognition, and speech recognition / synthesis research, has started to spur creativity. Pairing this technology with Augmented Reality, the future of robotics within the medical sphere looks very bright indeed.

Smart AI apps are beginning to be used today in clinical practice for automation of routine tasks and for other functions listed below:

Alerts and reminders are most general forms of AI integration: The machine scans a patient's lab results, drug orders, and updates the patient with an appropriate reminder. Advanced AI

programs can be directly interfaced with a patient monitor and used for detecting changes in a patient's condition.
Diagnostic Help.

Therapy fore-planning: Specific conditions that require elaborate treatment plans could benefit from AI tools during therapy planning. By incorporating an AI system that can automatically formulate plans based on specific conditions would add certain value to the physicians as well as patients.
Information Retrieval: AI software search apps can be created that constantly search the web for new knowledge or data that adds to diagnosis. All information is upgraded automatically here.
Image Interpretation: Multiple medical images can be instantaneously identified, from plane X-rays through to highly complex images like angiograms, CT, and MRI scans. Such systems for image recognition and interpretation have increasingly been adopted for clinical use, for example in detection of cancer or other abnormalities.

Insights on current systems using AI

Agilent Technologies (Andover, Massachusetts) has developed a smart ECG device that estimates the probability of acute
cardiac ischemia/ACI. This ACI time-insensitive predictive instrument holds good promise in increasing the accuracy of diagnosing ACI.

Intelligent Medical Imaging, Inc. (Florida) has designed the Micro21 microscopy workstation that successfully integrates neural network technology into blood analysis to identify and display white blood cells as well as red blood cells.

ATL Ultrasound, Inc. (Seattle-based firm) has developed a range of diagnostic ultrasound systems for imaging and monitoring cardiac tissue structures and activity. This system utilises an adaptive intelligence algorithm to scrutinise tissues by optimising millions of parameters during a patient examination, thereby eliminating irrelevant frequencies in returned signals.

Neuromedical Systems, Inc. (New Jersey) uses an application of neural networks to scan Pap smears and identify cells for review during cancer screening.

Apps like Babylon in the UK use AI to give medical consultation based on personal medical history and common medical knowledge. Users report their symptoms into the app, which uses speech recognition to compare against a database of illnesses. Babylon then offers a recommended action, taking into account the user's medical history.

The startup Sense.ly has developed Molly, a digital nurse to help people monitor patient's condition and follow up with treatments, between doctor visits. The program uses machine learning to support patients, specialising in chronic illnesses.

Developing pharmaceuticals through clinical trials can take more than a decade and cost billions of dollars. Making this process faster and cheaper could change the world. Amidst the recent Ebola virus scare, a program powered by AI was used to scan existing medicines that could be redesigned to fight the disease.

The program found two medications that may reduce Ebola infectivity in one day, when analysis of this type generally takes months or years – a difference that could mean saving thousands of lives.

Some of the key influencing factors like maturity attained by the AI systems, user acceptance, and glitches in
communications along with technical infrastructure continue to stand as barriers to the commercialisation opportunities that currently exist for AI. However, given that ongoing

innovations in this domain are moving so fast from academia and theory into reality are proof of the growing momentum in this field.

Call for collaboration:

At U-Are Technologies, We are in the business finding and applying future technologies to real world problems through immersive, visually rich solutions that engage users and drive customer satisfaction. We have recently introduced an incubation service for new and emerging technologies within AI, AR and VR. If you have an idea or technology that requires development, marketing and investment then do get in touch.

Marketing Dept.
U-Are Technologies Limited
+44 2039557558
email us here

This press release can be viewed online at: http://www.einpresswire.com