

IBM Watson rentre à l'université

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PARIS, 30 Octobre 2012 : IBM et la clinique de Cleveland annoncent la formation d'une collaboration historique visant à faire entrer Watson à la faculté de médecine Lerner de l'université de Case Western Reserve de la Clinique de Cleveland. L'équipe de chercheurs d'IBM qui a créé Watson travaillera en collaboration avec le personnel de la clinique de Cleveland et le corps enseignant afin d'améliorer les performances de la technologie Deep Question Answering (technologie permettant de répondre rapidement et précisément à des questions en langage naturel) intégrée à Watson appliqué en médecine.

Les capacités de Watson à analyser la signification et le contexte du langage humain et à traiter rapidement les informations afin de réunir les éléments nécessaires à formuler des réponses précises peuvent aider les décideurs tels que les médecins, les infirmières et les étudiants en médecine à révéler des connaissances et des données importantes enfouies sous d'énormes volumes d'information.

Watson a étendu ses connaissances dans le domaine de la médecine. La clinique de Cleveland et IBM y ont vu l'opportunité pour Watson d'interagir avec des étudiants en médecine afin de les aider à mieux étudier les nombreux défis d'apprentissage auxquels le secteur médical fait face aujourd'hui.

Une application d'apprentissage collaboratif intégrée à Watson sera à disposition des étudiants en médecine pour les aider à s'y retrouver rapidement parmi les journaux médicaux et les manuels, à proposer et à considérer un panel d'hypothèses, et à trouver des preuves afin d'étayer des réponses possibles, des diagnostics et des possibilités de traitements.

CLEVELAND, OH. - 30 Oct 2012: Cleveland Clinic and IBM (NYSE: [IBM](#)) announced today the formation of a collaboration to advance Watson's use in the medical training field. The IBM team of researchers that created Watson will work with Cleveland Clinic clinicians, faculty and medical students to enhance the capabilities of Watson's Deep Question Answering technology for the area of medicine.

Watson's ability to analyze the meaning and context of human language and quickly process information to piece together evidence for answers can help healthcare decision makers, such as clinicians, nurses and medical students, unlock important knowledge and facts buried within huge volumes of information.

Watson has been gaining knowledge in the field of medicine, and Cleveland Clinic with IBM recognized the opportunity for Watson to interact with medical students to help explore a wide variety of learning challenges facing the medical industry today.

Rather than attempting to memorize everything in text books and medical journals (now acknowledged as an impossible task), students are learning through doing – taking patient case studies, analyzing them, coming up with hypotheses, and then finding and connecting evidence in reference materials and the latest journals to identify diagnoses and treatment options in the context of medical training.

This process of considering multiple medical factors and discovering and evidencing solution paths in large volumes of data reflects the core capabilities of the Watson technology. Medical students will interact with Watson on challenging cases as part of a problem-based learning curriculum and in hypothetical clinical simulations. A collaborative learning and training tool utilizing the Watson technology will be available to medical students to assist in their education to learn the process of navigating the latest content, suggesting and considering a variety of hypotheses and finding key evidence to support potential answers, diagnoses and possible treatment options.

"Every day, physicians and scientists around the world add more and more information to what I think of as an ever-expanding, global medical library," said [C. Martin Harris, M.D.](#), Chief Information Officer of Cleveland Clinic. "Cleveland Clinic's collaboration with IBM is exciting because it offers us the opportunity to teach Watson to 'think' in ways that have the potential to make it a powerful tool in medicine. Technology like this can allow us to leverage that medical library to help train our students and also find new ways to address the public health challenges we face today."

Students will help improve Watson's language and domain analysis capabilities by judging the evidence it provides and analyzing its answers within the domain of medicine. Through engagement with this education tool and Watson, medical students and Watson will benefit from each other's strengths and expertise to both learn and improve their collaborative performance. The collaboration will also focus on leveraging Watson to process an electronic medical record (EMR) based on a deep semantic understanding of the content within an EMR.

The shift is clearly away from memorization and towards critical thinking where medical training programs will help student to use powerful discovery and language analysis tools like Watson to help them evaluate medical case scenarios and find evidence to help them carefully rationalize decisions. The physicians will rely on their own experience and expert critical thinking skills to read the evidence and make the final judgments.

"The practice of medicine is changing and so should the way medical students learn. In the real world, medical

case scenarios should rely on people's ability to quickly find and apply the most relevant knowledge. Finding and evaluating multistep paths through the medical literature is required to identify evidence in support of potential diagnoses and treatment options," said **Dr. David Ferrucci, IBM Fellow and Principal Investigator of the Watson project.**

Over time, the expectation is that Watson will get "smarter" about medical language and how to assemble good chains of evidence from available content. Students will learn how to focus on critical thinking skills and how to best leverage informational tools like Watson in helping them learn how to diagnose and treat patients.

"New discoveries and medical breakthroughs are growing our collective knowledge of medicine at an unprecedented pace, and tomorrow's doctors will have to embrace new tools and technology to complement their own knowledge and experience in the field," said **James Stoller, M.D., chair of the Education Institute at Cleveland Clinic.** *"Technology will never replace the doctor, but it can make us better. Our students and faculty are excited to play a role in getting us there."*

"Being able to work with the faculty and students at an organization like Cleveland Clinic will help us learn how to more efficiently teach and adapt Watson to a new field through interaction with experts. It's exciting to envision the possibilities for this next phase of Watson," added **Dr. Ferrucci.**

IBM and Cleveland Clinic will discuss the role of Watson for the future of healthcare and healthcare education today at the [Cleveland Clinic Medical Innovation Summit](#) being held October 29-31, 2012 in Cleveland, OH.

About Cleveland Clinic

Cleveland Clinic is a nonprofit multispecialty academic medical center that integrates clinical and hospital care with research and education. Located in Cleveland, Ohio, it was founded in 1921 by four renowned physicians with a vision of providing outstanding patient care based upon the principles of cooperation, compassion and innovation. Cleveland Clinic has pioneered many medical breakthroughs, including coronary artery bypass surgery and the first face transplant in the United States. U.S. News & World Report consistently names Cleveland Clinic as one of the nation's best hospitals in its annual "America's Best Hospitals" survey. About 2,800 full-time salaried physicians and researchers and 11,000 nurses represent 120 medical specialties and subspecialties. Cleveland Clinic Health System includes a main campus near downtown Cleveland, eight community hospitals and 18 Family Health Centers in Northeast Ohio, Cleveland Clinic Florida, the Lou Ruvo Center for Brain Health in Las Vegas, Cleveland Clinic Canada, and opening in 2013, Cleveland Clinic Abu Dhabi. In 2010, there were 4 million visits throughout the Cleveland Clinic health system and 167,000 hospital admissions. Patients came for treatment from every state and from more than 100 countries. Visit us at www.clevelandclinic.org. Follow us at www.twitter.com/ClevelandClinic.
