Seven of the Nation's Leading Technology Institutions Unveil Cognitive Computing Courses Leveraging IBM Watson Wednesday, May 07, 2014 02:04:00 PM (GMT)

ARMONK, N.Y., May 7, 2014 /PRNewswire/ -- IBM (NYSE: <u>IBM</u>) is partnering with the country's leading technology universities to launch <u>cognitive computing</u> courses that give students unprecedented access via the cloud to one of the Company's most prized innovations: <u>Watson</u>.

For the first time, enrollment is now open for fall 2014 cognitive computing courses at Carnegie Mellon University, New York University (NYU), The Ohio State University, Rensselaer Polytechnic Institute (RPI), University of California, Berkeley, University of Michigan and the University of Texas in Austin.

Co-designed by the Watson Group and leading academic experts in fields such as Artificial Intelligence and Computer Science, the courses will empower students with the technical knowledge and hands-on learning required to develop new cognitive computing applications fueled by Watson's intelligence.

Enrolled students will form a business team and together they will have access to their Watson instance via the Watson Developer Cloud. As a classroom, they will select an industry to focus on, such as retail, travel or healthcare, and then will work as a team to ingest relevant data into Watson and train it. Ultimately, the students will break into teams and develop prototype apps and a business plan based on their Watson industry of choice.

For example, in the retail domain questions can focus on: "How can Watson be applied to personalize consumer shopping experience? In the travel industry: "What changes would be applied to help consumers target their next vacation based on their experiences and interests? As result, each student will gain the perspective and vision of a technology entrepreneur who can transform industries and professions with cloud-delivered expert advisors that think, learn and discover valuable insights from massive amounts of data

The initiative is part of an ongoing effort to expand and strengthen student skills and understanding of <u>big</u> <u>data</u> and analytics in order to meet the growing demand for highly skilled analytics workers. IBM has been hosting Watson Case Competitions over the past year giving students a glimpse into the promise Watson holds to transform industry and professions.

According to research firm Gartner, Inc., smart machines will be the most disruptive change ever brought about by information technology, and can make people more effective, empowering them to do "the impossible." Building on the 4.4 million IT jobs Gartner predicts will be created to support Big Data by 2015, the seven universities will educate a new generation of innovators who can bring to life this new dynamic of people and machines working together to solve pressing industry and societal challenges.

Students who take the courses will begin by learning about Watson and its underlying technologies, including natural language processing and machine learning. Soon after, students will also learn that their syllabus quickly transitions from textbooks and discussions to hands-on engagement with Watson, itself, though the following course sections:

- Building Ideas for Cognitive Innovation: At each school, the course will allow students to discuss
 and choose a data-intensive industry, such as retail, travel or healthcare, that they believe is ripe for
 cognitive computing. In this stage, students will form into teams and design ideas for new online or
 mobile applications, that use Watson's intelligence to provide expert advice for users in their chosen
 industries.
- Fueling Watson's Knowledge with Data: The student teams will also develop the skills to upload and ingest data from their chosen industries into Watson's vast corpus of knowledge. Each team will learn how to train Watson to adapt to that domain. This entails testing and evaluating Watson's ability to provide evidence-based responses, which allows it to learn and improve with each interaction and outcome.
- Creating Cognitive Apps in the Cloud: From there, the student teams will be given a challenge that

no other course has ever offered: develop an application that is based on their idea and fueled by the data they ingested into Watson. Students will create and test prototype apps in the Watson Developer Cloud, using browser-based tools and Watson's application programming interface (API).

• **Developing Entrepreneurial Know-How:** In the course's final section, professors will guide students to think like high-tech entrepreneurs. Once their prototypes are ready, the student teams will build business plans for how their apps could thrive as market-ready solutions that fulfill unmet needs, solve real-world challenges and succeed commercially.

Today's news is the next major milestone in IBM's strategy to fuel an ecosystem of innovators who will help make cognitive computing the new standard of computing. In November 2013, IBM announced Watson as an application development platform in the Cloud. Today, nearly 2,000 individuals and organizations — ranging from start-ups and VC-backed companies to established players — have contacted IBM to share ideas for building cognitive applications that redefine how businesses and consumers make decisions. IBM also recently announced its intention to open Watson to corporate developers, to advance a new generation of apps infused with Watson's cognitive computing intelligence.

"By putting Watson in the hands of tomorrow's innovators, we are unleashing the creativity of the academic community into a fast-growing ecosystem of partners who are building transformative cognitive computing applications," said Michael Rhodin, Senior Vice President, IBM Watson Group. "This is how we will make cognitive the new standard of computing across the globe: by inspiring all catalysts of innovation, from university campuses to start-up offices, to take Watson's capabilities and create apps that solve major challenges."

To ensure its participating universities succeed in their vision to turn today's students into tomorrow's cognitive computing leaders, the IBM Watson Group will provide a range of resources and support, including:

- Support from IBM experts, including world-class developers and researchers, on course development, materials and implementation
- Guest lectures from senior IBM executives and thought leaders
- IBM Watson technical mentors who will provide guidance throughout the semester, as students work with Watson and build prototypes of cognitive computing apps
- Access to IBM Watson through the Watson Developer Cloud

IBM will also help its university partners advance their vision for cognitive computing education by launching a Watson Faculty Advisory Board. Working with IBM experts, the board, which includes faculty from the seven schools offering cognitive courses, will convene quarterly and discuss best practices, issues and opportunities relevant to advancing university curriculum.

Building Essential Skills for the Cognitive Era

The explosion of data-driven content has sparked a new wave of career opportunities for today's college students, from business analytics professionals to Chief Data Officers. Today's announcement from the IBM Watson Group extends the conversation about data-driven skills to highlight the need for professionals with expertise in fields such as natural language processing, machine learning and content lifecycle management. These skills are the building blocks for a new class of cognitive apps and services that deliver fast, evidence-based advice, by combing though millions of pages of data within seconds for discoveries that fuel smarter decisions and unleash creativity.

Watson has deep roots in the academic community, as IBM collaborated with eight universities to develop the cognitive innovation's capabilities. Since Watson's introduction to the world in 2011, IBM has introduced a range of activities to engage students in the emerging era of computing, including business case competitions, technical challenges and a Watson internship program.

By partnering with top educational institutions across the country, the Watson Group is empowering students from a range of disciplines for careers to move the cognitive era forward. This includes the IT developers who create cognitive apps, the entrepreneurs who commercialize the apps, and the business professionals who use them everyday to succeed.

About IBM

For more information on IBM Watson, please visit www.ibmwatson.com To join the social discussion about Watson include the hashtag #ibmwatson Follow Watson on Facebook: www.facebook.com/ibmwatson For more insights on this story please read this posts on IBM's A Smarter Planet blog: http://asmarterplanet.com/blog/2014/05/watson-goes-college-bringing-entrepreneurship-classroom.html

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