

Industry Practice Expo Invited Talk

The Business Impact of Deep Learning

Jeremy Howard
Kaggle
jeremy.howard@kaggle.com

ABSTRACT

In the last year deep learning has gone from being a special purpose machine learning technique used mainly for image and speech recognition, to becoming a general purpose machine learning tool. This has broad implications for all organizations that rely on data analysis. It represents the latest development in a general trend towards more automated algorithms, and away from domain specific knowledge. For organizations that rely on domain expertise for their competitive advantage, this trend could be extremely disruptive. For start-ups interested in entering established markets, this trend could be a major opportunity. This talk will be a non-technical introduction to general-purpose deep learning, and its potential business impact.

Categories and Subject Descriptors

I.2.6 [Artificial Intelligence]: Connectionism and neural nets.

General Terms

Algorithms, Performance

Keywords

Deep Learning, Machine Learning.

Bio

Jeremy is a serial entrepreneur, business strategist, developer, and educator. He is the President and Chief Scientist of Kaggle, a funded San Francisco startup that is currently growing quickly and has resulted in many scientific breakthroughs. He was ranked #1 participant in data science competitions globally in 2010 and 2011. He is also a noted educator, becoming the youngest faculty member at Singularity University, where he teaches data science. He was the founding CEO of two successful self-funded Australian startups (FastMail, and Optimal Decisions Group), both of which grew internationally and were sold to large international companies. Both companies are still being operated successfully. The World Economic Forum has awarded him the title “Young Global Leader” in recognition of his achievements.

He previously spent 8 years in management consulting at the world’s most exclusive firms, including McKinsey & Co, and AT Kearney (becoming the youngest engagement manager worldwide, and building a new global practice in what is now called “Big Data”). He is also a keen student, for example developing a new system for learning Chinese, which he used to develop strong Chinese language skills in just one year. Jeremy has mentored and advised many startups, and has also acted as an angel investor. He has contributed to a range of open source projects as a developer, and is also in demand as an expert commentator on various TV news programs.

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s). Copyright is held by the author/owner(s).

KDD '13, August 11–14, 2013, Chicago, Illinois, USA.

ACM 978-1-4503-2174-7/13/08.