

Title: The Master Algorithm

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The Master Algorithm: How the Quest for the Ultimate Learning Machine Will Remake Our World is a book by Pedro Domingos released in 2015. Domingos wrote the book in order to generate interest from people outside the field.

Overview

The book outlines five approaches of machine learning: inductive reasoning , connectionism , evolutionary computation , Bayes' theorem and analogical modelling . The author explains these tribes to the reader by referring to more understandable processes of logic , connections made in the brain , natural selection , probability and similarity judgments. Throughout the book, it is suggested that each different tribe has the potential to contribute to a unifying "master algorithm".

Towards the end of the book the author pictures a "master algorithm " in the near future, where machine learning algorithms asymptotically grow to a perfect understanding of how the world and people in it work. [1] Although the algorithm doesn't yet exist, he briefly reviews his own invention of the Markov logic network . [2]

In the media

In 2016 Bill Gates recommended the book, alongside Nick Bostrom 's Superintelligence , as one of two books everyone should read to understand AI. [3] In 2018 the book was noted to be on Chinese Communist Party general secretary Xi Jinping 's bookshelf. [4]

Reception

A computer science educator stated in Times Higher Education that the examples are clear and accessible. [5] In contrast, The Economist agreed Domingos "does a good job" but complained that he "constantly invents metaphors that grate or confuse". [6] Kirkus Reviews praised the book, stating that "Readers unfamiliar with logic and computer theory will have a difficult time, but those who persist will discover fascinating insights." [7]

A New Scientist review called it "compelling but rather unquestioning". [8]

References

Further reading

<https://www.wsj.com/articles/the-sum-of-human-knowledge-1442610803>

<http://www.kdnuggets.com/2015/09/book-master-algorithm-pedro-domingos.html>

<http://www.kdnuggets.com/2014/08/interview-pedro-domingos-master-algorithm-new-deep-learning.html> (interview)

External links

Official website