

THE MASTER ALGORITHM by PEDRO DOMINGOS

The book was published in 2015 by Penguin books. It is 329 pages everything included, so not really a heavy reading and has 10 chapters. The author is a successful academic.

I believe, the inspiration for the name is drawn from the “single algorithm” theory. According to this theory, the human brain uses one single algorithm to do everything he does. Therefore, it is so flexible and adaptable.

According to author, the central hypothesis of this book: *All knowledge -past, present, and future, - can be derived from data by a single, universal learning algorithm.* Whether this is possible or not is another deep dive philosophical discussion, which is not going to be conducted here. From this point, the author draws arguments for the existence of *The Master Algorithm* from different areas.

The author discusses five different approaches to the problem of master algorithm, which he calls five tribes of machine learning. These approaches are:

- Symbolists: who uses inverse deduction as their algorithm
- Connectionists: who uses back propagation
- Evolutionaries: with their genetic programming
- Bayesians: defenders of Bayes’ theorem
- Analogizers: using support vector machine.

In the rest of the book, the author discusses these five approaches more in detail and concludes that the master algorithm is probably going to be a combination of these five approaches. Although, I agree with that suggestion at superficial level, I would disagree at the core. I find this solution far too rough and simple.

In my opinion, it was good book to read. There were barely technical explanations or math. So, anyone can read that. However, I cannot also classify it as beginner-level book. I do not think someone with no idea about machine learning or computer sciences can just read and enjoy the book. I would recommend it to anyone in the field, independent of their expertise.