Machine Learning

Las 5 Tribus del Machine Learning

Rogelio Ferreira Escutia

Profesor / Investigador
Tecnológico Nacional de México
Campus Morelia

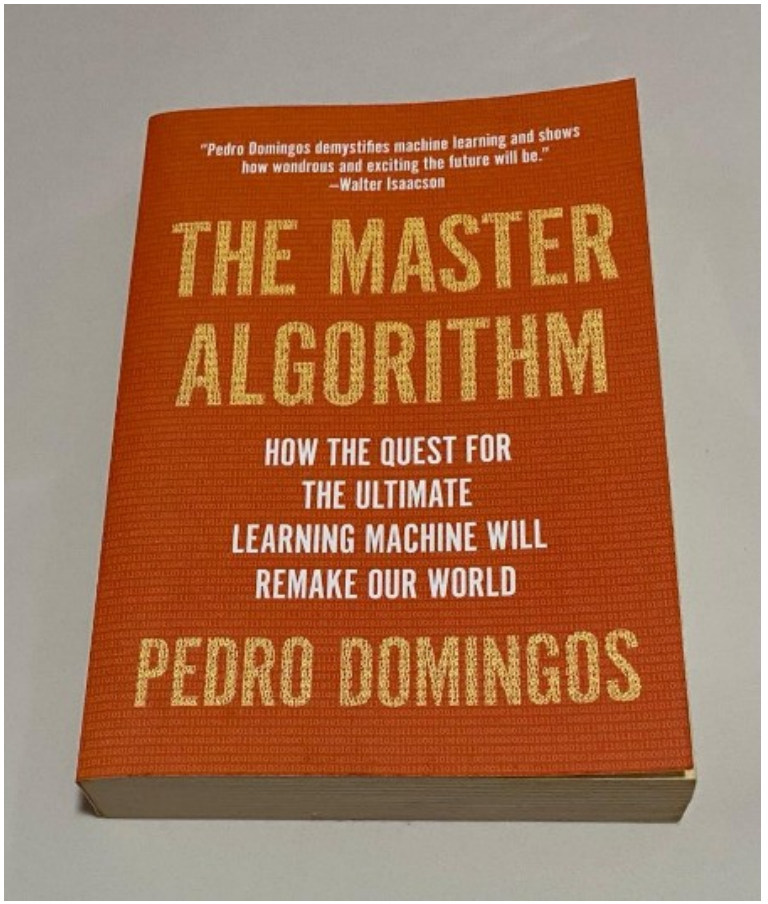
Pedro Domingos

Pedro Domingos

- **Pedro Domingos tiene una Maestría y Doctorado por la Universidad de Irvine en California y es Profesor Emérito de Departamento de Ingeniería y Ciencias de la Computación de la Universidad de Washington.**

Pedro Domingos

- **Es autor del libro "Master Algorithm", donde propone las 5 tribus que componen el área del Machine Learning.**



- **This AI expert found it “both exciting and scary” that Xi Jinping reads his book**

"This AI expert found it “both exciting and scary” that Xi Jinping reads his book", abril 2018, https://qz.com/1256330/artificial-intelligence-expert-pedro-domingos-reflects-on-chinas-xi-jinping-reading-his-book-the-master-algorithm

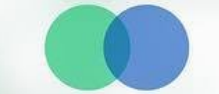
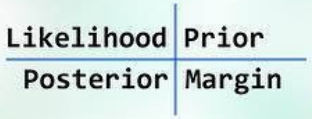
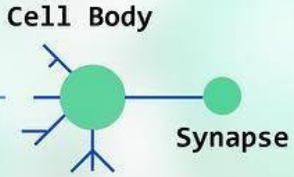
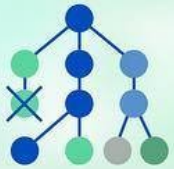
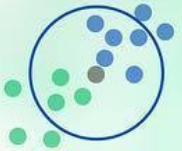
Las 5 Tribus del Machine Learning

The Five Tribes of Machine Learning

Tribe	Origins	Master Algorithm
Symbolists	*Logic, philosophy*	*Inverse deduction*
Connectionists	*Neuroscience*	*Backpropagation*
Evolutionaries	*Evolutionary biology*	*Genetic programming*
Bayesians	*Statistics*	*Probabilistic inference*
Analogizers	*Psychology*	*Kernel machines*

The Five Tribes

Machine Learning Evolution

1	2	3	4	5
Symbolists	**Bayesians**	**Connectionists**	**Evolutionaries**	**Analogizers**
				
Use symbols, rules, and logic to represent knowledge and draw logical inference	Assess the likelihood of occurrence for globalistic inference	Recognize and generalize patterns dynamically with matrices of probabilistic, weighted neurons	Generate variations and then assess the fitness of each for a given purpose	Optimize a function in light of constraints (”going as high as you can while staying on the road”)
Favored Algorithm Rules and Decision Trees	Favored Algorithm Naive Bayes or Markov	Favored Algorithm Neural Networks	Favored Algorithm Genetic Programs	Favored Algorithm Support Vectors

Rogelio Ferreira Escutia

Profesor / Investigador
Tecnológico Nacional de México
Campus Morelia

rogelio.fe@morelia.tecnm.mx

rogeplus@gmail.com

xumarhu.net

@rogeplus

https://www.youtube.com/channel/UC0on88n3LwTKxJb8T09sGjg

rogelioferreiraescutia