Machine Learning

Pedro Domingos 2015-09-22 A thought-provoking and wide-ranging exploration of machine learning and the race to build computer intelligences as flexible as our own In the world's top research labs and universities, teams of scientists are racing to build computer programs that can learn from data, adapt to new situations, and improve with experience. The Master Algorithm is their blueprint. It is said to learn when its performance improves with experience. Learning requires algorithms and programs that can take data and find patterns, and then use these patterns to make predictions and decisions. The Master Algorithm embodies the cutting-edge techniques and ideas that make modern machine learning effective. It is the first clear picture we have of what the future looks like: an skeleton system with a nervous system that learns, a mind capable of self-awareness, consciousness, vision, hearing, and feeling. The Master Algorithm is the framework that ties it all together. It brings together the important ideas in machine learning and neural networks and shows how they can be combined to create a single, unified system. It also provides a new way of thinking about the future of artificial intelligence and the role of human beings in it. It is a must-read for anyone interested in the future of intelligence, from scientists and computer scientists to philosophers and ethicists. It is a practical guide to building intelligent systems, from the basics of learning and decision-making to the latest techniques in deep learning and neural networks. It is a thought-provoking exploration of the promise and perils of artificial intelligence, and a manifesto for a future where machines can think and act like humans.