The Book of Why: The New Science of Cause and Effect

Description

Tweet

by Judea Pearl, Allen Lane, May 2018

Publisher blurb: "Correlation does not imply causation.' This mantra was invoked by scientists for decades in order to avoid taking positions as to whether one thing caused another, such as smoking and cancer and carbon dioxide and global warming. But today, that taboo is dead. The causal revolution, sparked by world-renowned computer scientist Judea Pearl and his colleagues, has cut through a century of confusion and placed cause and effect on a firm scientific basis. Now, Pearl and science journalist Dana Mackenzie explain causal thinking to general readers for the first time, showing how it allows us to explore the world that is and the worlds that could have been. It is the essence of human and artificial intelligence. And just as Pearl's discoveries have enabled machines to think better, The Book of Why explains how we can think better.

Introduction: Mind over data (pdf copy)

Chapter 1: The Ladder of Causation (pdf copy)

CONTENTS

Preface		ix
INTRODUCTION	Mind over Data	1
CHAPTER 1	The Ladder of Causation	23
CHAPTER 2	From Buccaneers to Guinea Pigs: The Genesis of Causal Inference	53
CHAPTER 3	From Evidence to Causes: Reverend Bayes Meets Mr. Holmes	93
CHAPTER 4	Confounding and Deconfounding: Or, Slaying the Lurking Variable	135
CHAPTER 5	The Smoke-Filled Debate: Clearing the Air	167
CHAPTER 6	Paradoxes Galore!	189
CHAPTER 7	Beyond Adjustment: The Conquest of Mount Intervention	219
CHAPTER 8	Counterfactuals: Mining Worlds That Could Have Been	259
CHAPTER 9	Mediation: The Search for a Mechanism	299
CHAPTER 10	Big Data, Artificial Intelligence, and the Big Questions	349
Acknowledgmen	ts	371
Notes		373
Bibliography		377
Index		405

Reviews: None found yet, but they will be listed here when found

2020 05 20: New material from Judea Pearl – "On this page I plan to post viewgraphs and homeworks that I currently use in teaching CAUSALITY. So far, we have covered the following chapter s":

vii

http://bayes.cs.ucla.edu/BOOK-2K/viewgraphs.html

Category

1. Books

Date 23/12/2024 Date Created 17/05/2018 Author admin