

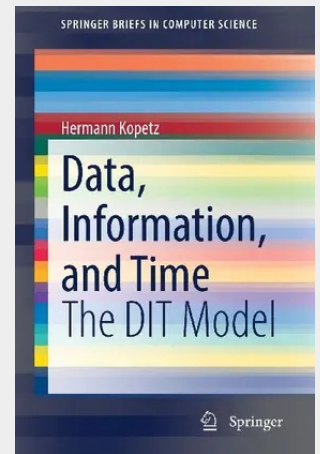
Data, Information, and Time

The DIT Model

This SpringerBrief presents the *data- information-and-time (DIT) model* that precisely clarifies the semantics behind the terms *data*, *information* and their relations to the *passage of real time*. According to the DIT model a data item is a symbol that appears as a pattern (e.g., visual, sound, gesture, or any bit pattern) in physical space. It is generated by a human or a machine in the current contextual situation and is linked to a concept in the human mind or a set of operations of a machine. An information item delivers the sense or the idea that a human mind extracts out of a given natural language proposition that contains meaningful data items. Since the given tangible, intangible and temporal context are part of the explanation of a data item, a change of context can have an effect on the meaning of data and the sense of a proposition.

The DIT model provides a framework to show how the flow of time can change the truth-value of a proposition. This book compares our notions of data, information, and time in differing contexts: in human communication, in the operation of a computer system and in a biological system. In the final Section a few simple examples demonstrate how the lessons learned from the DIT-model can help to improve the design of a computer system.

This SpringerBrief presents the data- information-and-time (DIT) model that precisely clarifies the semantics behind the terms data, information and their relations to the passage of real time. According to the DIT model a data item is a symbol that appears as a pattern (e.g., visual, sound, gesture, or any bit pattern) in physical space. It is generated by a human or a machine in the current contextual situation and is linked to a concept in the human mind or a set of operations of a machine. An information item delivers the sense or the idea that a human mind extracts out of a given natural language proposition that contains meaningful data items. Since the given tangible, intangible and temporal context are part of the explanation of a data item, a change of context can have an effect on the meaning of data and the sense of a proposition. The DIT model provides a framework to show how the flow of time can change the truth-value of a proposition. This book compares our notions of data, information, and time in differing contexts: in human communication, in the operation of a computer system and in a biological system. In the final Section a few simple examples demonstrate how the lessons learned from the DIT-model can help to improve the design of a computer system.



53,49 €

49,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783030963286

Medium: Buch

ISBN: 978-3-030-96328-6

Verlag: Springer

Erscheinungstermin: 18.03.2022

Sprache(n): Englisch

Auflage: 1. Auflage 2022

Serie: SpringerBriefs in Computer Science

Produktform: Kartoniert

Gewicht: 149 g

Seiten: 75

Format (B x H): 155 x 235 mm

