DESCRIPTION

A comprehensive look at General automata and how it can be used to establish the fundamentals for communication in human-computer systems.

Drawing on author Eldo C. Koenig's extensive expertise and culling from his thirty-four previously published works, this seminal resource presents knowledge structures for communication in Human-Computer Systems (HCS) based on General automata. The resulting model provides knowledge representations for software engineering.

Of the many features required for a method to achieve the desired communication in HCS, Knowledge Structures for Communications in Human-Computer Systems identifies six of them in great length-extracting and storing the knowledge of sentences; knowledge association; deductive processes; inferences; feedback; and sequencing of knowledge-along with illustrations for achieving them by the General Automata Method. After presenting the analysis for each feature, the book includes practical applications that illustrate the results. Koenig also describes algorithms and programs that achieve some of the features, and provides readers with additional algorithms and further research.

Richly illustrated throughout to elucidate concepts, Knowledge Structures for Communications in Human-Computer Systems is an excellent teaching text suitable for both academic and industrial settings.
ABOUT THE AUTHOR

Eldo C. Koenig began his professional career with the U.S.A. War Department, Manhattan District, in work associated with the atomic bomb. A retired professor of the University of Wisconsin–Madison’s computer sciences department, Koenig is an active member of ACM, IEEE Computer Society, and the AAAS. He has published over fifty works pertaining to computers and computing and was the recipient of several prestigious awards, including the Allis-Chalmers Fellowship Award and the Alfred Noble Prize in 1951.

SERIES

Practitioners