



Axiomatizing Qualitative Process Theory (Classic Reprint) (Paperback)

By Ernest Davis

Forgotten Books, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Excerpt from Axiomatizing Qualitative Process Theory We show that the type of reasoning performed by Forbus [1985] Qualitative Process (QP) program can be justified in a first-order theory that models time and other measure spaces as real-valued quantities. We consider the QP analysis of a can of water with a safety valve being heated over a flame. We exhibit a first-order theory for the microworld involved in this example, and we prove the correctness of the first two transitions in the envisionment graph. We discuss the possibility of deriving the closure conditions in the theory via non-monotonic inference. One way to increase confidence in a reasoning program is to show that the conclusions that it draws correspond to valid inferences within some easily intelligible logical theory. Such a correspondence has been shown for many of the best known physical reasoning programs. The calculations performed by QSIM [Kuipers, 86] correspond to theorems in real analysis, under a natural interpretation; [Duchier, 91] exhibits full first-order proofs of these. Likewise the reasoning in NEWTON [de Kleer, 77] and ENVISION [de...



Reviews

A very great ebook with perfect and lucid answers. It can be packed with wisdom and knowledge I found out this book from my dad and i encouraged this publication to learn.

-- Elena McLaughlin

This written publication is fantastic. I am quite late in start reading this one, but better then never. You will not feel monotony at at any time of your respective time (that's what catalogues are for concerning should you ask me).

-- Tevin McClure