Using a Functional Language for Financial Risk Assessment

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Abstract

This article describes Syntel, a knowledge representation language used in building large-scale expert systems for financial risk assessment. Syntel is an outgrowth of rule-based systems such as MYCIN and network-based systems such as Prospector. Unlike typical rule- or frame-based expert system shells, however, Syntel is a data-driven, purely functional language providing probabilistic inference plus many kinds of functionality associated with spreadsheets and database systems.