

PACKAGE ID - 000662IBMPC00 FRA

KWIC TITLE - Fuzzy Risk Analyzer

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 03/01/1993 **PUBLICATION DATE** - 11/01/1993

DESCRIPTION - FRA is a general purpose code for risk analysis using fuzzy, not numeric, attributes. It allows the user to evaluate the risk associated with a composite system on the basis of the risk estimates of the individual components.

PACKAGE CONTENTS - Software Abstract; Media Directory; FRA User's Guide; Media Includes Source Code, Object Code;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 3.5 Diskette

METHOD OF SOLUTION - Fuzzy arithmetic module performs operations on linguistic variables. Parser module verifies the syntax. Problem solution relies on the best fit to a selected number of fuzzy sets representing the system risk.

COMPUTER - IBM PC

OPERATING SYSTEMS - DOS/MS Windows

PROGRAMMING LANGUAGES - C++

SOFTWARE LIMITATIONS - Computer memory.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - In addition to an overall risk assessment, FRA provides the critical path of a composite system; it also gives a numeric risk value consistent with the Department of Energy (DOE) risk tables.

OTHER PROG/OPER SYS INFO - Requires Borland compiler with object windows.

HARDWARE REQS - IBM PC compatible computer that runs MS Windows, Version 3.0 or higher.

TIME REQUIREMENTS - A few seconds for a complex system with 20 components.

REFERENCES - A. Zardecki, Fuzzy Risk Analyzer: User's Guide, Los Alamos National Laboratory draft report, November 1993.

E S T S C
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SOFTWARE ABSTRACT

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SUBJECT CLASS CODE - P

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
F CODES
FUZZY LOGIC
RISK ASSESSMENT
COMPUTER NETWORKS
SAFEGUARDS

EDB SUBJECT CATEGORIES -
990200

SPONSOR - DOE/DP

PACKAGE TYPE - AS - IS