

Fuzzy Logic Technology & Applications

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May 1994

470 Pages

IEEE Member Price \$50.00 Nonmember Price \$59.95

Catalogue No: 94CR0101-6 ISBN 0-7803-1383-6

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OVERVIEWS

Introduction to Fuzzy Models; Consumer Products; Vehicular Technology; Control; Computer Vision; Image Processing and Recognition

VEHICULAR TECHNOLOGY

Trainable Fuzzy and Neural-Fuzzy systems for Idle-Speed Control; Evaluation of Fuzzy and Neural Vehicle Control; Follow-up Characteristics of a Small Automatic Guided Vehicle system with Fuzzy Control; Self Organizing Fuzzy Logic Control of a Level Control Rig; Fuzzy Logic anti-Lock Brake System for a Limited Range Coefficient of Friction Surface; Intelligent Cruise Control with Fuzzy Logic; Design of a Rule-Based fuzzy Controller for the Pitch Axis of an Unmanned Research Vehicle; Fuzzy Expert System for Automatic Transmission Control; Application of Fuzzy Logic to Shift Scheduling Method for Automatic Transmission; Adaptive Traffic Signal Control Using Fuzzy Logic; A Control System of Carburization Using Fuzzy-PID Combined Controller; Fuzzy Control for Active Suspension Design

ROBOTICS

Fuzzy Controlled Gait Synthesis for a Biped Walking Machine; A Fuzzy Logic Force Controller for a Stepper Motor Robot; Hierarchical Intelligent Control for Robotic Motion by Using Fuzzy, Artificial Intelligence, and Neural Network; Hierarchical Control for Autonomous Mobile Robots with Behavior-Decision fuzzy Algorithm; Fuzzy Navigation of a Mobile Robot; Blending Reactivity and Goal-Directedness in a Fuzzy Controller; Fuzzy Logic based Robotic Arm Control; Robotic Deburring Based on Fuzzy Force Control; Manipulator for Man-Robot Cooperation (Control Method of Manipulator/Vehicle Sys-

tem with fuzzy Inference)

MOTORS, SERVOS, AND DRIVES

Adaptive Fuzzy Control of High Performance Motion Systems; Fuzzy Algorithm for Commutation of Permanent Magnet AC Servo Motors without Absolute Rotor Position Sensors; Fuzzy Logic-Based Control of Flux and Torque in AC-Drives; Adaptive Fuzzy Techniques for Slip-Recovery Drive control; Fuzzy Controller for Inverter Fed Induction Machines; A Fuzzy Current Controller for Field-Oriented Controlled Induction Machine by Fuzzy Rule

POWER SYSTEMS

A Fuzzy Knowledge-Based System for Bus Load Forecasting; A Symptom-Driven Fuzzy System for Isolating Faults; Comparison of fuzzy Logic Based and Rule Based Power System Stabilizer; Analysis of Power System Dynamic Stability via Fuzzy Concepts

INDUSTRY APPLICATIONS

Application of Neuro-Fuzzy Hybrid Control System to Tank Level Control; Minimization of Combined Sewer Overflows Using Fuzzy Logic control; Identification and Analysis of Fuzzy Model for Air Pollution — an Approach to Self-Learning Control of CO Concentration; Self-Learning Fuzzy Modeling of Semiconductor Processing Equipment; Range Tests Made Fuzzy: An Alternate Perspective on the Built-in-Test of Real Time Embedded Systems; Fuzzy Seam-Tracking Controller; Neural Network Based Decision Model Used for Design of Rural Natural Gas Systems; Application of Fuzzy Control System to Hot Strip Mill; A Fuzzy Classification Technique for Predictive Assessment of Chip Breakability for Use in Intelligent Machining Systems; A Rule-Based Fuzzy Logic Controller for a PWM Inverter in

Photo-Voltaic Energy Conversion Scheme; Fuzzy Control of Wire Feed Rate in Robot Welding

ELECTRONICS

Using custom-Designed VLSI Fuzzy Inferencing Chips for the Autonomous Navigation of a Mobile Robot; Fuzzy Control of an Industrial Robot in Transputer Environment; Fuzzy Logic Approach to Placement Problem; A Fuzzy Algorithm for Multiprocessor Bus Arbitration

SENSORS

Improving dynamic Performance of Temperature Sensors with Fuzzy Control Technique; Multi-Sensor Integration System Based on Fuzzy Inference and Neural Network for Industrial Application; A Fuzzy Logic Approach for Handling Imprecise Measurements in Robotic Assembly

AEROSPACE

Space Shuttle Attitude control by Reinforcement Learning and Fuzzy Logic; Intelligent Control of a Flying Vehicle Using Fuzzy Associative Memory System; Development and Simulation of an F/A-18 Fuzzy Logic Automatic Carrier Landing System

COMMUNICATIONS

An RLS Fuzzy Adaptive Filter with Application to nonlinear Channel Equalization; Model-Reference Neural Color Correction for HDTV Systems Based on Fuzzy Information Criteria; Classified Vector Quantization Using Fuzzy Theory

BIOENGINEERING

Fuzzy Control of Blood Pressure During Anesthesia with Isoflurane; Real-Time Fuzzy Control of Mean Arterial Pressure in Post-surgical Patients in an Intensive Care Unit; Fuzzy ARTMAP Neural Network Compared to Linear Discriminant Analysis Prediction of the

Length of Hospital Stay in Patients with Pneumonia; Fuzzy Classification of Heart Rate Trends and Artifacts

IMAGE PROCESSING AND RECOGNITION

Application of the Extended Fuzzy Pointing Set to Coin Grading; Region Extraction for Real Image Based on Fuzzy Reasoning; A Fuzzy Approach to Scene Understanding

PATTERN RECOGNITION

Recognition of Facial Expressions Using Conceptual Fuzzy Sets; Qualitative/Fuzzy Approach to Document Recognition; Fuzzy Artificial Network and its Application to a Command Spelling Corrector; A New Similarity Measurement Method for Fuzzy-Attribute Graph Matching and its Application to Handwritten Character Recognition; Automatic Target Recognition Fuzzy System for Thermal Infrared Images; A Vowel Recognition Using Adjusted Fuzzy Membership Functions

MANAGEMENT

Dynamics and Fuzzy Control of a Group; The Fuzziness Index for Examining Human Statistical Decision-Making; Linking the Fuzzy Set Theory to Organizational Routines: A Study in Personnel Evaluation in a Large Company

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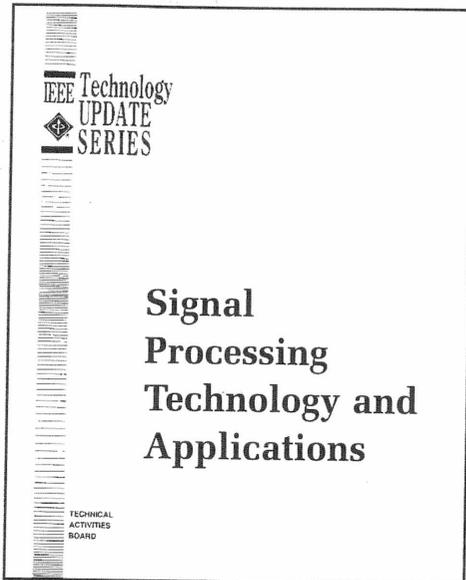
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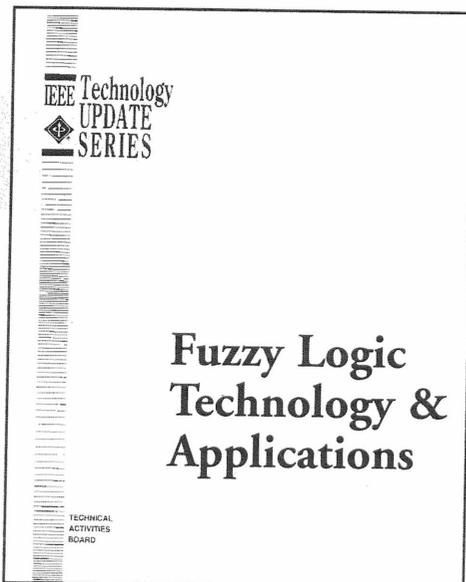
List Price: \$59.95 Member Price: \$50.00

Catalog No: CR1057 ISBN: 0-7803-2469-2

Hardcover 560 pages (approx)

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Catalog No: 94CR1016 ISBN 0-7803-1383-6

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