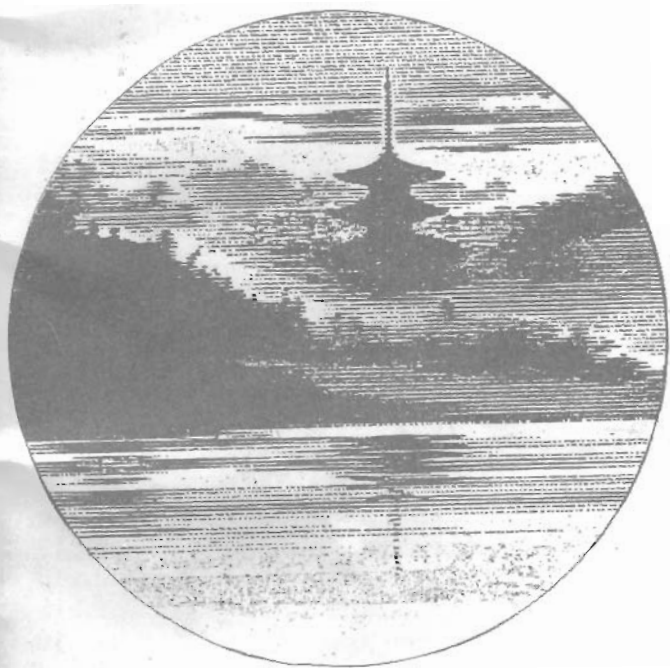


# ISCAS '85

1985 INTERNATIONAL  
SYMPOSIUM ON  
CIRCUITS AND SYSTEMS



June 5-7, 1985

Kyoto Hotel

Kyoto, Japan

**ADVANCE PROGRAM**



C A S

THE INSTITUTE OF  
ELECTRONICS AND  
COMMUNICATION  
ENGINEERS OF  
JAPAN



THE INSTITUTE OF  
ELECTRICAL AND  
ELECTRONICS  
ENGINEERS, INC.

**S7AI**      **Friday, June 7**  
**Room I**   **1:30 pm to 5:00 pm**

Special Session

### Systems Approach for Power Systems Engineering

**Organizer/Chairman:** F.F. Wu, *University of California, Berkeley, CA, USA*

**Organizer:** H. Haneda, *Kobe University, Kobe, Japan*

**Co-Chairman:** T. Sakaguchi, *Mitsubishi Electric Corporation, Amagasaki, Japan*

**S7AI. 1: Transient Stability Analysis of Power Systems with Transmission Losses**

Y. Ohta, M. Sasaki, Tadashi Matsumoto, *Fukui University, Fukui, Japan*

**S7AI. 2: An Intelligent Support System for Power System Planning**

R. Fujiwara, T. Sakaguchi, Y. Kohno, Hiroshi Suzuki, *Mitsubishi Electric Corporation, Amagasaki, Japan*

**S7AI. 3: Geometric Approach to Bad Data Analysis in Electric Power System State Estimation**

R.J. Kaye, *University of New South Wales, Australia*

**S7AI. 4: Performance Indices for Measuring the Robustness of Power System Operation**

R. Fischl, F. Merced, *Drexel University, Philadelphia, PA, USA*

**S7AI. 5: Analysis of Vulnerability of Power Network Configurations**

C.C. Liu, *University of Washington, Seattle, WA, USA*  
F.F. Wu, *University of California, Berkeley, CA, USA*

**R7EA**      **Friday, June 7**  
**Room A**   **6:30 pm to 9:00 pm**

Regular Session

### VLSI Design Architecture

**Chairman:** G.D. Hachtel, *University of Colorado, Boulder, CO, USA*

**Co-Chairman:** T. Chiba, *Sharp Corporation, Tenri, Japan*

**R7EA. 1: A Data-Flow Array Convolver for Two-Dimensional Convolution**

K. Onaga, *Hiroshima University, Higashi-Hiroshima, Japan*, H. Kawanishi, *NEC Corporation, Nakahara, Kawasaki, Japan*

**R7EA. 2: Design and VLSI Implementation of a Concurrent Solver for N Coupled Least-Squares Fitting Problems**

E.F. Deprettere, K. Jainandunsing, *Delft University of Technology, Delft, Netherlands*

**R7EA. 3L: A New Technique for Symbolic Function Generation Using Number Theoretic Transform**

W.C. Siu, *Hong Kong Polytechnic, Hong Kong*, Chih-Fan Chen, *Chinese University of Hong Kong, Hong Kong*

**R7EA. 4: A VLSI Implementation of RNS-Based Architectures**

M.A. Bayoumi, G.A. Jullien, W.C. Miller, *University of Windsor, Windsor, ONT, Canada*

**R7EA. 5L: A Low Cost Design Environment for Custom and Semi-Custom Integrated Circuit Design**

A. Legrand, G.K. Egan, I. Donaldson, *Royal Melbourne Inst. of Technology, Melbourne, Australia*

**R7EA. 6: A Functional Operation Architecture for Image Processing**

L. Palmier, *ETCA/CTME/OP, Arcueil Cedex, France*, F. Devos, *I.E.F., Orsay Cedex, France*, C. Legrand, *ETCA/CTME/OP, Arcueil Cedex, France*, B. Zavidovique, *AFDAC/ETCA, Paris, France*

**R7EA. 7L: On the Architecture of a Monolithic Median Filter with Variable Window Widths**

N. Kanopoulos, J.J. Hallenbeck, *Research Triangle Institute, Research Triangle Park, NC, USA*

**R7EB**      **Friday, June 7**  
**Room B**   **6:30 pm to 9:00 pm**

Regular Session

### Design and Testing of Logic Circuits

**Chairman:** H. Fujiwara, *Meiji University, Tokyo, Japan*

**R7EB. 1: Fault Identification in t-Diagnosable Systems for Fault Tolerant Computation**

F. Lombardi, *University of Colorado, Boulder, CO, USA*

**R7EB. 2: PROD: A VLSI Fault Diagnosis System**

P. Odryna, A. Strojwas, *Carnegie-Mellon University, Pittsburgh, PA, USA*

**R7EB. 3: New Directions in the Design for Testability in VLSI Circuits**

I.L. Sayers, G. Russell, D.J. Kinniment, *University of Newcastle Upon Tyne, Newcastle Upon Tyne, UK*