THE SIXTH INTERNATIONAL SYMPOSIUM ON MULTIPLE-VALUED LOGIC

May 25-28, 1976
University Center • Utah State University • Logan, Utah

Cosponsored by: ACM, IEEE Computer Society, Office of Naval Research, and Utah State University

For further information, contact Stephen Su, Electrical Engineering Dept., U.S.U., Logan, Utah 84322. Telephone (801) 752-4100, ext. 7506 (office); (801) 752-6717 (home)

Tuesday, May 25
6:30-8:30 p.m. Registration and get-acquainted hour
8:30-9:30 p.m. Planning Session for future symposium

Wednesday, May 26
8:30-9:00 a.m. Introduction: S. Y. H. Su, Symposium Chairman, Z. Vranesic, Program Chairman
Welcome: G. L. Taggart, President of U.S.U., E. J. Middlebrooks, Dean of Engineering, K. Baker, Head of Electrical Engineering

9:00-9:50 a.m. "A Survey of Multiple-valued Algorithmic Logics: From a Practical Point of View," D. Rine, West Virginia U.

2:50-3:40 "Multiple-valued Charge-Coupled Devices," U. Strasilla, Swiss Federal Institute of Technology

3:40-5:00 "Applications of Multiple-valued Logic," (panel)
Chairman: M. S. Michalski

5:00-6:00 Social Hour

Thursday, May 27
(Session A: Walnut Room; Session B: Room 329)

8:30-10:30 a.m. Session 1

(1A) "Multi-valued Multi-threshold Networks," O. Ishizuka, Miyazaki U.
"Cellular and Hybrid Threshold Networks," C. Moraga, U. of Dortmund
"Three Cell Structures for Ternary Cellular Arrays," J. A. Bate and J. C. Muzio, U. of Manitoba
"The Implementation of a Multi-valued Parallel Divider Array," J. Newton, U. of Toronto

"Logic Properties of Unate and of Symmetric Discrete Functions," J. P. Deschamps and A. Thayse, MBLE Research Laboratory
"Further Results on m-TMC Forms for Multi-valued Function," K. L. Kodandapani, and D. K. Pradhan, U. of Regina

11:00-12:00 Session 2—Invited Talk, Walnut Room

"Associative Memories as Means for Implementing Multiple-valued Logic," Y. H. Pao and J. Altman, Case Western Reserve U.
1:00-2:00 Tour of U. S. U. Facilities
2:00-3:00 Session 3

(3A) "Single Fault Detection in Multi-valued Combinational Circuits," R. Spillman, Utah State U.

(3B) "Every Reduct of Two-element Boolean Algebra can be Finitely Axiomatized by Modus Ponens or Substitution Rule," S. J. Surma

3:30-5:00 Session 4

"Static-hazard-free T-gate for Ternary Memory Element and Its Application to Ternary Counters," M. Kameyama and T. Higuchi, Tohoku U.

(4B) "Decisive Venn Diagrams," G. Epstein, Indiana U.
"Many-valued Propositional Intuitionism," C. G. Morgan, U. of Victoria

5:00-7:00 Social Hours
7:00-10:00 Banquet
Friday, May 28
8:30-10:30 a.m. Session 5

(5A) "Two-place Decomposition and the Synthesis of Many-valued Switching Circuits," D. M. Miller, U. of New Brunswick; J. C. Muzo, U. of Manitoba
"Noise Margins in Multi-valued Logic Circuits," D. Etiemble, U. of Paris VI; M. Israel, CNAM Paris

"On Multi-valued Complete Codes," T. Kitahashi and K. Tanaka, Osaka U.; S. Kanoyori, Nomura Coordinate Research Centre

(5B) "Fuzzy Reasoning and the Logic of Uncertainty," B. R. Gaines, U. of Essex
"Fuzzy Maps and Their Applications in the Simplification of Fuzzy Switching Functions," A. Kandel, New Mexico Institute of Mining and Technology
"N-variable Fuzzy Maps with Application to Disjunctive Decomposition of Fuzzy Switching Functions," G. Schwede, New Mexico Institute of Mining and Technology

11:00-12:00 Session 6—Invited Talk, Walnut Room
1:30-3:00 Session 7

(7A) "The Binary Representation of m-valued Logic with Applications to Decision Elements," J. Loader, Brighton Polytechnic
"Application of Multi-valued Logics to the Study of Human Movement Control and of Movement Disorders," L. Kohout, U. of London

(7B) "A Minimization Algorithm for Ternary Switching Functions," T. C. Yang and A. Wojcik, Illinois Institute of Technology

3:30-5:10 Session 8—Recent Results

GUIDED TOURS
1. Yellowstone and Grand Teton Parks—$375/person double occupancy, 6 days/5 nights; includes meals, lodging and transportation, scenic cruise on Lake Yellowstone, boat trip on Snake River, tram ride in Teton Village and a melodrama at Jackson Hole.
2. Bryce, Zion and Grand Canyon National Parks and Las Vegas—$261/person double occupancy, 5 days/4 nights; includes meals, lodging and transportation, scenic tours of the parks and one night club and dinner show in Las Vegas.

For information, contact Colburn Travel Service, 60 E. Center, Logan, Utah 84321 (801) 752-6115

LOCAL ACCOMMODATIONS

Reserve your room with the motels before May 20th to guarantee a place to stay. Rooms will be held until 6:00 p.m. on day of arrival unless deposit of the first night’s rental is made.

Baugh Motel—153 S. Main, Logan, Utah 84321 (801) 752-5220
Holiday House—447 N. Main, Logan, Utah 84321 (801) 752-9141

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1. Includes copy of proceedings plus one luncheon
2. Includes copy of proceedings plus two luncheons, one banquet
3. Includes copy of proceedings plus three luncheons, one banquet

Full Time Students—$10 before May 5th, $15 after May 5th. Includes copy of proceedings

No. of banquet tickets at $7.00 each

No. of people attending spouse’s program

LOCAL TRANSPORTATION

A U. S. U. bus will provide free transportation from the Salt Lake Airport to Logan

May 25
May 25
May 29

Iv. SLC 3 p.m.  Iv. SLC 6 p.m.  Iv. Logan 10 a.m.

ar. Logan 5 p.m. ar. Logan 8 p.m.  ar. SLC 12 room

Plane service from Key Airlines:

SLC to Logan 8:00 a.m.—8:50 a.m.
4:45 p.m.—5:10 p.m.

Logan to SLC 10:01 a.m.—10:25 a.m.
6:15 p.m.—7:15 p.m.

Greyhound bus leaves SLC at 8:15 a.m., 3:40 p.m., 8:15 p.m.