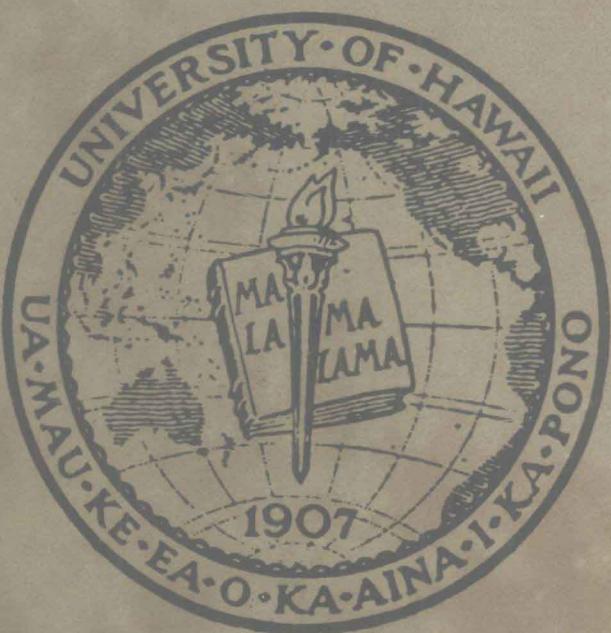


PROCEEDINGS of the
SIXTH HAWAII
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ON SYSTEM SCIENCES

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SIXTH HAWAII INTERNATIONAL CONFERENCE
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Edited By
Art Lew



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FOREWORD

These Proceedings serve the scientific and engineering communities as a permanent record of the papers presented at the Sixth Hawaii International Conference on System Sciences, held at the University of Hawaii, Honolulu, January 9-11, 1973. The Conference is the sixth in a series devoted to the state of the art in the System Sciences. A special subconference on "Urban and Regional Systems: Modeling, Analysis, and Decision Making," was held concurrently, the proceedings of which appear in a supplement to this volume. It is hoped that the many excellent papers will stimulate the exchange of ideas on an international basis to the benefit and advancement of science and society.

The Conference was sponsored by the University of Hawaii's Department of Information and Computer Sciences and the Department of Electrical Engineering, in cooperation with the IEEE Professional Groups on Circuit Theory, Information Theory, and Systems, Man, and Cybernetics; the IEEE Computer Society; the IEEE Control Society; the Hawaii Section of the IEEE; Simulation Councils, Inc.; and the Society for Industrial and Applied Mathematics.

We gratefully acknowledge the financial support provided by the U. S. Army Research Office, Durham; the State of Hawaii Department of Planning and Economic Development; and the University's Hawaii Environmental Simulation Laboratory.

Many colleagues and co-workers have contributed their time and talents to the success of the Conference. Bharat Kinariwala served as main Conference Chairman, while Richard Bauman and Crawford S. Holling served as Co-Chairmen of the Special Subconference on Regional and Urban Systems. Rahul Chatopadhyay served as Program Chairman of the main Conference, while Bruce Plasch served as Program Chairman for the Special Subconference. Their combined planning and coordinating efforts have made the Conference possible. Thanks should also be expressed to Eugene Grabbe and Ginger Plasch of the Hawaii State Center for Science Policy and Technology Assessment, Department of Planning and Economic Development, for organizing the Assessment Workshop held at the Special Subconference.

Of course, mahalo to Dianne Elliott, Ann Ho, Joanne Lim, Jeanne Moriyasu, and Kay Tokunaga for their staff support, and especially to Sharen Gomoto for her work in all phases of the Conference details. Additional thanks are extended to Doreen Leland for her administrative support.

Art Lew

Editor

TABLE OF CONTENTS

| | | |
|--|--|-----|
| Conference Organization | | III |
| Foreword | | IV |
| A-1 SPECIAL SESSION: COMPUTER AIDS TO PROGRAM VERIFICATION Chairman: W. D. Maurer, University of California, Berkeley | | |
| A SEMANTICS-DIRECTED INTERPRETER J. Chang | | 1 |
| SOME NEW SEMANTIC METHODS W. D. Flannery | | 4 |
| ALGOL-60 PROGRAM VERIFICATION Y. C. Chu | | 6 |
| AUTOMATIC VERIFICATION OF PROGRAMS WRITTEN IN CDC 6400 ASSEMBLY LANGUAGE S. K. Kwok | | 9 |
| A FORTRAN-PROGRAM VERIFIER WRITTEN IN FORTRAN P. Wong | | 11 |
| A-2 SPECIAL SESSION: MATHEMATICAL ECOLOGY Chairman: G. Leitmann, University of California, Berkeley | | |
| HOW TO CHOOSE A MODEL E. C. Pielou | | |
| POPULATION INTERACTIONS IN A PERIODIC ENVIRONMENT G. Oster, Y. Takahashi, and D. Auslander | | 14 |
| RATIONALIZING TRANSITIONS IN POPULATION MODELS E. R. Lewis | | 18 |
| MATHEMATICAL MODELING OF FOREST ECOSYSTEMS R. A. Goldstein, D. L. DeAngelis, R. V. O'Neill, J. R. Kercher, and H. H. Shugart | | 21 |
| A NEW APPROACH TO MODELING SCHISTOSOMIASIS K. Lee | | 23 |
| IS THERE AN OPTIMUM LEVEL OF POPULATION? S. F. Singer | | |
| OPTIMAL CONTROL OF RENEWABLE RESOURCES AND PEST POPULATIONS B. S. Goh | | 26 |
| OPTIMAL CONTROL OF THE SPREAD OF A CONTAGIOUS DISEASE T. L. Vincent and W. J. Grantham | | 29 |
| ON THE VERIFICATION OF ECOLOGICAL MODELS H. Bremermann and J. Schwartz | | |

| | | |
|-----|---|----|
| A-3 | TIME-VARYING AND DISTRIBUTED PARAMETER SYSTEMS Chairman: D. M. Wiberg, UCLA | |
| | AN ALGEBRAIC REALIZATION THEORY FOR LINEAR CONTINUOUS-TIME SYSTEMS E. W. Kamen | 32 |
| | ON THE TRANSFORMATION OF NONLINEAR SYSTEMS E. Freund | 35 |
| | STATE DESCRIPTIONS FOR DISTRIBUTED PARAMETER TRANSFER FUNCTION MATRICES K. S. Bajaj | 38 |
| | MATRIX EXPONENTIAL SERIES APPROACH TO DISTRIBUTED PARAMETER SYSTEMS C. T. Constantinides, R. G. Jacquot, and L. L. McElhaney . . | 41 |
| | INVARIANT IMBEDDING AND A TRANSFORMATION PROCEDURE FOR REDUCING CLASSES OF BOUNDARY VALUE PROBLEMS INTO EQUIVALENT INITIAL VALUE SYSTEMS C. E. Dunham and V. W. Eveleigh | 45 |
| | A CLASS OF DISTRIBUTED PARAMETER SYSTEM IDENTIFICATION VIA DIFFERENTIAL APPROXIMATION AND QUASILINEARIZATION S. P. Chaudhuri | 49 |
| | AN INITIAL VALUE METHOD FOR THE COMPUTATION OF EIGENVALUES AND EIGENFUNCTIONS FOR INTEGRAL OPERATORS R. E. Kalaba and M. R. Scott. | |
| A-4 | PATTERN RECOGNITION - METHODS Chairman: E. E. Gose, University of Illinois, Chicago | |
| | AN APPROACH TO PATTERN CLASSIFICATION WHEN LITTLE IS KNOWN T. L. Fine | 53 |
| | A FAST METHOD FOR PROBABILISTIC AND FUZZY CLUSTER ANALYSIS USING ASSOCIATION MEASURES E. H. Ruspini | 56 |
| | ESTIMATION OF THE INFORMATION IN A TWO CLASS SAMPLE G. A. Butler and H. B. Ritea | 59 |
| | A NON-PARAMETRIC METHOD WITH APPLICATIONS TO PATTERN RECOG- NITION AND MODE ESTIMATION D. A. Michalopoulos | 62 |
| | ON THE ESTIMATION OF THE INVERSE OF A COVARIANCE MATRIX A. A. Lopez-Toledo | 66 |
| | CONDITIONS FOR PERFECT DISCRIMINATION FOR INDEPENDENT MEASUREMENTS A. K. Jain and B. Chandrasekaran | 72 |

SOME SECOND-ORDER TECHNIQUES FOR SELECTING SUBSETS OF PATTERN
RECOGNITION PROPERTIES

E. E. Gose and F.B.H. Wu 73

| | | |
|-----|---|-----|
| B-1 | COMPUTER SCIENCE - SOFTWARE Chairman: W. J. Chandler, University of Southern California | |
| | SYSTEM THEORY CONCEPTS IN COMPUTER SCIENCE J. A. Goguen | 77 |
| | FULL TABLE QUADRATIC QUOTIENT SCATTER TABLE SEARCHING W. A. Burkhard | 81 |
| | AUTOMATIC PROGRAM MODULE DESIGN AND OPTIMIZATION J. F. Nunamaker, Jr., W. C. Nylin, Jr., and B. Konsynski | 83 |
| | AN ANALYTICAL MODEL FOR MEMORY CONTENTION IN CACHE MEMORY MULTIPROCESSOR SYSTEMS C. B. Ramchandani | 87 |
| | A NOTE ON PAGINATION AND REPLACEMENT POLICIES A. Lew and N. Jain | 90 |
| | ON THE DESIGN OF THE AOBA SYSTEM J. Oizumi, S. Noguchi, M. Aizawa, and Y. Ebihara | 94 |
| | A COMPILER-COMPILER SYSTEM FOR A STACKER MACHINE Y. Koga and M. Masuya | 97 |
| | ON THE INCREMENTAL APPROACH TO LEFT-TO-RIGHT PARSING D. Pager | |
| | EFFICIENT PROGRAMMING TECHNIQUES FOR LR(k) PARSING D. Pager | |
| | META S: A METALANGUAGE FOR COMPILERS W. J. Chandler | 101 |
| | COMPILER MEASURES IN THE PERSPECTIVE OF PROGRAM DEVELOPMENT, A COMPARISON OF THE IBM PL/I F-LEVEL COMPILER WITH CORNELL'S PL/C IN A STUDENT ENVIRONMENT R. Uzgalis, G. Simon and W. Speckart | 104 |
| | PRELIMINARY DESIGN OF A DEBUGGING COMPILER (SUMMARY) A. Lew | 108 |
| B-2 | OPTIMAL CONTROL AND GAMES Chairman: G. M. Anderson, Eglin AFB, Florida | |
| | THE APPROXIMATE SOLUTION OF A CLASS OF CONSTRAINED CONTROL PROBLEMS G. Wahba and M. Z. Nashed | 112 |
| | COMPACT FORMS OF THE GENERALIZED LEGENDRE CONDITIONS AND THE DERIVATION OF SINGULAR EXTREMALS B. S. Goh | 115 |

| | |
|---|-----|
| THE AUTOMATION OF TRANSVERSALITY CONDITIONS R. G. Brusch and R. H. Schapelle | 118 |
| A NEW GRADIENT TECHNIQUE TO OPTIMISE STATE TRAJECTORIES OF NONLINEAR DYNAMICAL SYSTEMS P. C. P. Bhatt | 121 |
| CONSTRAINED MINIMAX OPTIMIZATION BY GRAZOR SEARCH J. W. Bandler and T. V. Srinivasan | 125 |
| CONTROL OF MULTIPLE SYSTEMS WITH DELAYS D. H. Chyung | 129 |
| ON THE RELATIVE LEADERSHIP PROPERTY OF STACKELBERG STRATEGIES T. Basar | 131 |
| MIXED STRATEGIES IN DIFFERENTIAL GAMES WITH INFORMATION DELAY D. J. Wilson | 135 |
| A STOCHASTIC GOAL-KEEPING DIFFERENTIAL GAME D. Wiberg | 138 |
| ON THE EXISTENCE AND STRUCTURE OF SOLUTIONS TO A CLASS OF STOCHASTIC GAMES WITH A GENERALIZED MULTI-QUADRATIC COST FUNCTION M. Mintz | 141 |
| B-3 PATTERN RECOGNITION: SPEECH AND IMAGE PROCESSING Chairman: C. A. Kulikowski, Rutgers University | |
| A MULTISTAGE LEARNING PARADIGM FOR COMPUTER RECOGNITION OF SPEECH G. M. White | 144 |
| AN INTERACTIVE PROGRAMMING SYSTEM WITH SPEECH INPUT C. C. Neroth and H. B. Baskin | 148 |
| MACHINE RECOGNITION OF HANDPRINTED CHARACTERS D. L. Caskey and C. L. Coates, Jr. | 150 |
| COMPARISON OF DIFFERENT FILTER STRUCTURES FOR RESTORATION OF IMAGES B. R. Hunt and H. C. Andrews | 154 |
| NOTE ON THE ERROR SIGNAL OF BLOCK QUANTIZERS M. Tasto and P. A. Wintz | 158 |
| NON-LINEAR FILTERING AND SPATIAL FILTERING OF PICTORIAL INFORMATION A. G. Tescher and H. C. Andrews | |
| MULTILEVEL FEATURE ANALYSIS IN PATTERN DESCRIPTION K. Hanakata | |

| | |
|---|-----|
| RESOLUTION IMPROVEMENT OF REMOTE SENSING DATA A. Caprihan and W. W. Mendell | 159 |
| NUMERICAL INVERSION OF THE VECTOR-COVARIANCE MATRIX OF A TWO-DIMENSIONAL RANDOM FIELD M. P. Ekstrom | |
| C-1 SPECIAL SESSION: THEORETICAL AND PRACTICAL APPROACHES TO CONSTRUCTING ULTRA-RELIABLE COMPUTER SYSTEMS Chairman: Y. Tohma, Tokyo Institute of Technology | |
| A GENERAL MODEL FOR THE STUDY OF FAULT TOLERANCE AND DIAGNOSIS J. F. Meyer | 163 |
| SYNTHESIS OF FAULT-TOLERANT RING COUNTERS Y. Tohma and Y. Sugimoto | 166 |
| FAULT-TOLERANCE IN THE MODULAR SPACECRAFT COMPUTER H. Hecht and L. A. Fry | |
| AN EXAMPLE OF HIGH RELIABLE COMPUTER SYSTEM -- THE TELEGRAPH AUTOMATION SYSTEM H. Uchiyama | |
| ORGANIZING COMPUTER COMPLEX FOR YACS K. Ban, S. Iikawa, K. Kutsuzawa, and T. Ishida. | |
| C-2 SPECIAL SESSION: PERSPECTIVES IN OPTIMIZATION Chairman: H. J. Greenberg, Southern Methodist University | |
| GLOBAL OPTIMIZATION THROUGH HOMOTOPIC SURFACES S. Kim and P. H. Randolph | |
| TWENTY-FIVE YEARS OF LINEAR PROGRAMMING J. E. Kalan | |
| SADDLE VALUE CRITERIA WITH APPLICATION TO OPTIMAL CONTROL PROBLEMS M. S. Bazaraa and J. J. Goode | 170 |
| A COLUMN GENERATION ALGORITHM FOR OPTIMAL TRAFFIC ASSIGNMENT G. L. Nemhauser | |
| A BUG'S EYE VIEW OF DESCENT ALGORITHMS D. G. Luenberger | |
| STRONG CONVEXITY CUT INEQUALITIES FOR PROBLEMS WITH STRUCTURE F. Glover and D. Sommer | |

| | | |
|-----|---|-----|
| C-3 | COMMUNICATION THEORY Chairman: V. Norum, Computer Software Analysts | |
| | ANALYSIS OF DELTA MODULATION FOR SOME CLASSES OF INPUT PROCESSES S. Cambanis and E. Masry | 173 |
| | DEMODULATION OF PULSE MODULATED SIGNALS USING KALMAN FILTERING TECHNIQUES J. B. Moore and R. M. Hawkes. | 174 |
| | AN ADAPTIVE BIT SYNCHRONIZATION ALGORITHM UNDER TIME-VARYING ENVIRONMENT L. R. Chow, H. A. Owen, Jr. and P. P. Wang. | 177 |
| | OPTIMUM UNIFORM SAMPLE RATES FOR LINEAR ESTIMATION L. C. Ludeman | 181 |
| | PSEUDO-NOISE SYSTEM CHARACTERIZATION IN THE PRESENCE OF NON-LINEARITIES E. A. Quincy, D. F. Moore and R. G. Jacquot | 184 |
| | DETECTION OF SIGNALS IN WHITE GAUSSIAN NOISE BY HUMAN EYE: COMPARISON TO A MATCHED FILTER DETECTOR M. J. Nahvi | |
| D-1 | SPECIAL SESSION: COMPUTER SYSTEMS AND SECURITY Chairman: M. Pirtle, NASA (Ames) | |
| | Speakers: J. Findley R. London B. Abbott | |
| D-2 | SPECIAL SESSION: OPTIMIZATION TECHNIQUES FOR FUNCTIONS OF N VARIABLES Chairman: E. H. Mookini, University of Hawaii | |
| | CONJUGATE DIRECTION METHODS IN OPTIMIZATION THEORY M. R. Hestenes. | 187 |
| | OPTIMIZATION OF FUNCTIONS OF N VARIABLES USING THE CGS ALGORITHM E. H. Mookini | 188 |
| | CGS METHODS FOR CONSTRAINED PROBLEMS R. Den nemeyer | |
| | MULTIVALUED FUNCTIONS AND OPTIMIZATION S. M. Robinson | 189 |

| | | |
|-----|---|-----|
| D-3 | SWITCHING AND AUTOMATA - I Chairman: S. Noguchi, Tohoku University, Japan | |
| | DIAGNOSTIC TEST GENERATION FOR COMBINATIONAL LOGIC NETWORKS BY MULTI-PATH SENSITIZING Y. Koga and K. Fujii | 190 |
| | DESIGN OF SEQUENTIAL MACHINES FOR RELIABLE FAULT DIAGNOSIS D. K. Pradhan and S. M. Reddy | 194 |
| | SINGLE FAULT-TOLERANT ASYNCHRONOUS SEQUENTIAL CIRCUITS G. K. Maki, D. H. Sawin III, and G. R. Huckell. | 198 |
| | APPLICATION OF PROGRAMMED MEMORY AS A DIRECT TRANSITION CONTROLLER IN COMPUTER DESIGN H. A. Sholl | 201 |
| | REALISATION OF TANT NETWORKS AS MULTI-OUTPUT FUNCTIONS Sureshchander and P.C.P. Bhatt | 205 |
| | BOOLEAN AND PSEUDO-BOOLEAN RELATIONS: A UNIFYING AGENT IN LOGIC DESIGN G. J. Klir. | 208 |
| | TERNARY THRESHOLD LOGIC NETWORKS REALIZING 3-VALUED MULTITHRESHOLD FUNCTION A. Imamiya, S. Noguchi and J. Oizumi. | 212 |
| D-4 | IDENTIFICATION Chairman: Y. Sunahara, Kyoto University, Japan | |
| | IDENTIFICATION SYSTEMS BY PROJECTION METHODOLOGY, APPLICATIONS AND IMPLICATIONS L. M. Levy. | 215 |
| | IDENTIFICATION OF MULTIVALUED NONLINEARITIES IN A CLASS OF NOISY TIME INVARIANT DYNAMIC SYSTEM R. E. Klein and P. L. Vallandigham | 218 |
| | AN IDENTIFICATION OF TIME VARYING LINEAR SYSTEM WITHOUT A PRIORI INFORMATION ON VARIATION OF SYSTEM PARAMETERS T. Okita and H. Takeda | 221 |
| | IDENTIFICATION OF COMPUTER-REGULATED STOCHASTIC PROCESSES N. A. Lindberger | 224 |
| | STATE ESTIMATION OF NONLINEAR SYSTEM BY APPLYING STOCHASTIC APPROXIMATION METHOD K. Abe, H. Takeda and Y. Yoshioka | 227 |
| | ON THE DIGITAL IMPLEMENTATION OF A STOCHASTIC APPROXIMATION ALGORITHM J. E. Brown, III | 230 |
| | PARALLEL ALGORITHMS FOR CONDITIONAL MEAN STATE ESTIMATION E. Tse and R. E. Larson | 233 |

| | | |
|-----|--|-----|
| E-1 | SWITCHING AND AUTOMATA - II Chairman: R. S. Kashef, University of Southern California | |
| | ON CANONICAL REPRESENTATIONS AND REVERSAL PROPERTIES OF TRIGGER EVENTS H. T. Hao and M. M. Newborn | 236 |
| | APPLICATIONS OF PARTITION ALGEBRA TO THE DESIGN OF ASYNCHRONOUS SEQUENTIAL CIRCUITS D. H. Sawin III, G. K. Maki and E. M. Baily | 239 |
| | ON THE ANALYSIS OF FUZZY LOGIC A. Kandel | 242 |
| | NONLINEARITY: A NEW NECESSARY CONDITION FOR LOGICAL COMPLETENESS IN K-VALUED LOGIC Y. N. Patt | 246 |
| | NONDETERMINISTIC FINITE AUTOMATA REVISITED W. J. Savitch | 249 |
| | A NOTE ON REGULAR LANGUAGES BASED ON PATTERN CHECKING R. T. Yeh | 252 |
| | ON A REALIZATION OF QUASI-PERFECT AUTOMATA BY PERFECT AUTOMATA Y. Masunaga, S. Noguchi and J. Oizumi | 255 |
| | ALGEBRAIC PROPERTIES OF CELLULAR AUTOMATA T. Araki, M. Harao, S. Noguchi and J. Oizumi. | 258 |
| | A GRAPH THEORETICAL APPROACH TO THE ITERATIVE AUTOMATON M. Harao and S. Noguchi | 261 |
| | A UNIVERSAL PROGRAMMABLE CELLULAR ARRAY J. H. Rowan and R. S. Kashef | 264 |
| | UNIVERSAL 4-STATE CELLULAR AUTOMATA F. Nourai and R. S. Kashef. | 268 |
| | ON THE SYNTHESIS OF SEQUENTIAL MACHINES IN MINIMAL-COMPLEXITY CELLULAR ARRAYS E. Hyman and R. S. Kashef | 271 |
| E-2 | OPTIMIZATION APPLICATIONS Chairman: H. Sorenson, University of California, San Diego | |
| | A MULTILEVEL HIERARCHICAL CYBERNETIC MODEL OF ORGANIZATION STRUCTURE AND DYNAMICS T. O. Kvålseth | 274 |
| | OPTIMAL CONTROL THEORY APPLIED TO A PREDATOR WITH MULTIPLE PREY SPECIES P. L. Katz | 277 |
| | PERTURBATION OF PHARMACOKINETIC CONTROL PROCESS MODELS D. B. Tuey | 280 |

| | |
|---|-----|
| OPTIMIZATION OF A SYSTEM CONTAINING SWITCHES AS A DISCONTINUOUS SYSTEM Y. Murakami and M. Nishimura | 283 |
| OPTIMIZATION OF BASEBAND DATA TRANSMISSION VIA PONTRYAGIN'S MAXIMUM PRINCIPLE Y. Huang | 286 |
| OPTIMUM REPLACEMENT POLICIES WITH DELAY T. Nakagawa and S. Osaki | 289 |
| LOAD REGULATION OF TANDEM QUEUES M. T. El-Bardai | |
| ON-LINE IDENTIFICATION AND CONTROL OF A CHEMICAL REACTOR VIA THE EXTENDED KALMAN FILTER D. G. Fontaine, A. B. Corripio, C. L. Smith and P.W. Murrill . | |
| AN OPTIMAL CONTROL FORMULATION FOR ICEBERG TOWING K. Srinivasan and W. J. Vetter. | |
| A MANAGEMENT APPROACH TO EFFECTIVE INVENTORY CONTROL A. R. Gelbdach | 292 |
| SUB-OPTIMAL SOLUTION OF A CLASS OF DISCOUNTED MARKOV DECISION PROCESS WITH ABSORBING STATE S. DasGupta | |
| A CONTINUOUS "TURNPIKE" THEOREM J. A. Ortega | 295 |
| E-3 ESTIMATION AND FILTERING | |
| Chairman: R. W. Bass, Brigham Young University | |
| THE INITIATION OF A KALMAN FILTER WITH UNCERTAIN INITIAL CONDITIONS C. Chang | 299 |
| SPLINE NONLINEAR FILTERING FOR DISCRETE STOCHASTIC SYSTEMS Y. Jan | 302 |
| MINIMAL-ORDER OPTIMAL FILTERS FOR DISCRETE-TIME LINEAR STOCHASTIC SYSTEMS T. Yoshikawa | 306 |
| OPTIMUM REALIZABLE PRE-EMPHASIS FILTERS VIA KALMAN FILTERING TECHNIQUES D. K. S. Tam and J. B. Moore. | 309 |
| A SUBOPTIMAL FILTER FOR GENERAL COLORED MEASUREMENT NOISE Y. Miyamoto and H. Takeda. | 312 |
| ADAPTIVE TUNING OF FILTERS FOR TRAJECTORY ESTIMATION E. Tse, R. M. Dressler and Y. Bar-Shalom | 315 |
| NUMERICAL SOLUTION OF THE INTEGRAL EQUATIONS FOR OPTIMAL SEQUENTIAL FILTERING R. E. Kalaba and K. Spingarn | 318 |

| | |
|--|-----|
| SUBOPTIMAL FILTERS WITH REDUCED ON-LINE COMPUTATIONAL REQUIREMENTS C. P. Shortwell and D. D. Sworder | 321 |
| PRACTICAL NON-DIVERGENT IMPLEMENTATION OF THE KALMAN-BUCY STATE ESTIMATOR R. W. Bass and V. D. Norum | |
| E-4 BIOCYBERNETICS Chairman: S. Grossberg, MIT | |
| SCAN-RESCAN PROCESSES AND DYNAMIC PROGRAMMING: NUCLEAR MEDICINE AND TUMOR DETECTION WITH ADDITIONAL APPLICATIONS TO THE OTHER RELATED AREAS R. Bellman, H. Sugiyama, B. Kashef and S.S. Friedland | 322 |
| AUTOMATED DIAGNOSIS OF PNEUMOCONTOSIS FROM POSTERIOR-ANTERIOR CHEST RADIOGRAPHS R. P. Kruger, W. B. Thompson and A. F. Turner | 326 |
| COMPUTER AIDED CALCULATION OF LEFT VENTRICULAR CARDIAC VOLUMES R. P. Kruger, C. B. McGregor, and R. Barndt | 330 |
| COMPACT DIGITAL CODING OF ELECTROCARDIOGRAPHIC DATA J. R. Cox, Jr. and K. L. Ripley | 333 |
| MECHANICAL MODELING OF EYE MUSCLE DYNAMICS E. L. Keller | 337 |
| PULMONARY OPTIMIZATION IN EXERCISE S. M. Yamashiro and F. S. Grodins | |
| A QUANTIFICATION OF EMOTIONAL STATES J. W. LaPatra and A. French | 340 |
| A MULTI-MODEL OF ALCOHOLISM J. W. LaPatra and A. French | 343 |
| ACHIEVING SYSTEM ISOMORPHISM BETWEEN ARTIFICIAL LEARNING AND BIOLOGICAL EVOLUTION S. J. Wan and L. A. Wan | 346 |
| THEORY FORMATION IN MEDICINE: A NETWORK STRUCTURE FOR INFERENCE C. Kulikowski | 350 |
| THE TRANSFORMATION AND SHORT TERM MEMORY OF PATTERN FEATURES WITHIN REVERBERATING ON-CENTER OFF-SURROUND NETWORKS S. Grossberg | 352 |

| | | |
|-----|--|-----|
| F-1 | SPECIAL SESSION: MULTI-USER CHANNELS - THEORY Chairman: N. T. Gaarder, University of Hawaii | |
| | SOME COMMENTS ON MULTI-USER CHANNELS T. Cover | 353 |
| | MRS. GERBER'S LEMMA AND SOME APPLICATIONS A. D. Wyner | |
| | SOURCE CODING A BINARY SYMMETRIC SOURCE OVER SIMPLE NETWORK R. M. Gray | 354 |
| | BROADCASTING SIMULTANEOUSLY AT SEVERAL LEVELS OF DISTORTION P. B. Bergmans | |
| | FEEDBACK IN MULTI-ACCESS CHANNELS N. T. Gaarder and J. K. Wolf | |
| F-2 | SPECIAL SESSION: COMPUTER ARCHITECTURE Chairman: M. J. Flynn, Johns Hopkins University | |
| | MICROPROGRAMMING M. J. Flynn | |
| | DISTRIBUTED INTELLIGENCE T. C. Chen | |
| | PEPE: A HIGHLY PARALLEL ASSOCIATIVE PROCESSOR G. D. Bergland | |
| | MULTIPROCESSING W. W. Lichtenberger | |
| F-3 | LARGE-SCALE SYSTEMS Chairman: M. Athans, Massachusetts Institute of Technology | |
| | ON THE DECOMPOSITION OF LARGE-SCALE SYSTEMS B. Patel and B. Kinariwala | 356 |
| | A DECOMPOSITION ALGORITHM FOR A DUAL ANGULAR TYPE QUADRATIC PROGRAMMING K. Aoki and M. Kanezashi | 358 |
| | PIECEWISE METHODS OF SOLUTION IN SENSITIVITY STUDIES M. V. Bhat and H. K. Kesavan | 361 |
| | DECOPLED MULTIVARIABLE SYSTEMS: CANONICAL FORMS, POLE ASSIGNMENT AND COUPLING SENSITIVITIES P. K. Kar and M. J. Bergman. | 364 |

| | |
|---|-----|
| SYSTEM ANALYSIS OF A LARGE DIGITAL CONTROL SYSTEM T. Soeda, S. Tagami and T. Myojo | 367 |
| HOW TO REDUCE COMPUTING TIME 75% FOR PHYSICALLY SYMMETRIC SYSTEMS D. Stoutemyer | 370 |
| G-1 SPECIAL SESSION: MULTI-USER CHANNELS (ALOHA) | |
| Chairman: F. Kuo, University of Hawaii | |
| Discussants: N. T. Gaarder, University of Hawaii R. Binder, University of Hawaii | |
| CAPACITY AND EXCESS CAPACITY OF ALOHA CHANNELS N. Abramson | |
| CAPTURE EFFECTS ON ALOHA CHANNELS L. Roberts | |
| TRADEOFF BETWEEN DELAY AND THROUGHPUT FOR ALOHA CHANNELS L. Kleinrock and S. Lam | |
| A SYSTEM FOR BROADCAST COMMUNICATION: RESERVATION-ALOHA W. Crowther, R. Rettberg, D. Walden, S. Ortsen and F. Heart | 371 |
| STEADY-STATE ANALYSIS OF A SLOTTED AND CONTROLLED ALOHA SYSTEM WITH BLOCKING R. Metcalfe | 375 |
| G-2 GRAPHS AND NETWORKS | |
| Chairman: R. Willoughby, IBM | |
| TOPOLOGICAL MODELIZATION OF COMPLEX SYSTEMS L. A. Gerardin | 379 |
| A GRAPHIC REPRESENTATION SCHEME FOR NETWORK TIMING ANALYSIS H. H. Nishino | 382 |
| GENERATION OF TREES, CO-TREES AND 2-TREES OF A LINEAR GRAPH R. Cahit and I. Cahit | 385 |
| PLANARIZATION OF CIRCUIT GRAPHS D. A. Mlynski and P. Pernards | 389 |
| TOPOLOGICAL PROCESSOR FOR USE IN ANALYZING ELECTRICAL NETWORKS J. L. Clark | |
| PLANNING THE EXPANSION OF A POWER TRANSMISSION SYSTEM - A GRAPH THEORETICAL APPROACH C. C. Gonzaga and R. M. Persiano | 393 |