

APPLICATIONS

Trajectory control programs
Real-time Stenotype transcription
Interactive flight program simulator
Interactive aeronautical charting
Interactive scheduling system
A computer graphics system
Real-time traffic flow optimization
Programming for economic lot-sizes
Large-scale interactive administrative system
Interactive-batch network evaluation
Large-problem computation and display
Chief programmer team
Virtual machine computing in engineering
Numerical control for complex surfaces
Management business simulation in APL
Virtual storage in a scientific environment
Encoding verbal information
A real-time check-clearing system
Net change material requirements planning
Concepts of financial models
Financial planning tools and techniques
Planning-data systems
Financial modeling on small systems
Interactive simulation for banking
Forecasting techniques
Interactive graphics system for business decisions
Interactive computer user behavior
Direct-access device simulation
Skylab terminal system performance analysis
Structured design
Hierarchical laboratory automation system

COMPILERS

Code-generation for large-language compilers
Compiler assignment of data items to registers
Design of a checkout compiler

COMPUTER SYSTEMS

Readings in microprogramming
Virtual storage and machine concepts
Channel and direct access architecture
Structure of virtual storage operating systems
 Influences of dynamic address translation
 OS/VS2-2 concepts and philosophies
 DOS/VS architecture and design
Advanced function extended with multiprocessing
Multiprocessing programming design
Skylab terminal system performance analysis
OS/VS1 concepts and philosophies
Hierarchical laboratory automation system

DATA REPRESENTATION

Real-time Stenotype transcription
A computer graphics system
Encoding verbal information
Data structures and accessing in data-base systems
Describing data in computer networks

Quarles, 9, 1, 12
Newitt, 9, 1, 24
Jacobs, 9, 2, 145
Leutje, 9, 3, 219
Brewer, 10, 1, 62
Belady, 10, 2, 143
Black, 10, 3, 217
Gorenstein, 10, 3, 232
Wimbrow, 10, 4, 260
Hobgood, 11, 1, 2
Fromm, 11, 1, 41
Baker, 11, 1, 56
McGrath, 11, 2, 131
Almond, 11, 2, 150
Wahi, 11, 2, 169
Callaway, 11, 3, 200
Hagamen, 11, 4, 278
Banham, 11, 4, 329
Orlicky, 12, 1, 2
Kingston, 12, 2, 113
Dzielinski, 12, 2, 126
Lande, 12, 2, 145
Gordon, 12, 2, 161
Brown, 12, 2, 172
Aiso, 12, 2, 187
Ravin, 2, 3, 238
Boies, 13, 1, 2
Nahouraii, 13, 1, 19
Mancini, 13, 2, 94
Stevens, 13, 2, 115
Cole, 13, 4, 307

Elson, 9, 3, 167
Day, 9, 4, 281
Marks, 12, 3, 315

Davies, 11, 1, 16
Parmelee, 11, 2, 99
Brown, 11, 3, 186

Auslander, 12, 4, 368
Scherr, 12, 4, 382
Birch, 12, 4, 401
MacKinnon, 13, 1, 32
Arnold, 13, 2, 60
Mancini, 13, 2, 94
Wheeler, 13, 3, 213
Cole, 13, 4, 307

Newitt, 9, 1, 24
Belady, 10, 2, 143
Hagamen, 11, 4, 278
Senko, 12, 1, 30
Fredericksen, 12, 3, 257

**Five-year
subject
index**

VSAM data set design

Keehn, 13, 3, 186

FILE ORGANIZATION

Evaluation techniques for storage hierarchies
Authorization in shared files
Large-problem computation and display
Data structures and accessing in data-base systems
Describing data in computer networks
Data dictionary / directories
Indexing design considerations
Evaluation of storage hierarchies
VSAM data set design

Mattson, 9, 2, 78
Friedman, 9, 4, 258
Fromm, 11, 1, 41
Senko, 12, 1, 30
Fredericksen, 12, 3, 257
Uhrowczik, 12, 4, 332
Wagner, 12, 4, 351
Gecsei, 13, 2, 163
Keehn, 13, 3, 186

GRAPHICS

Interactive flight program simulator
Interactive aeronautical charting
A computer graphics system
Large-problem computation and display
Virtual machine computing in engineering
Numerical control for complex surfaces
Interactive graphics system for business decisions

Jacobs, 9, 2, 145
Luetje, 9, 3, 219
Belady, 10, 2, 143
Fromm, 11, 1, 41
McGrath, 11, 2, 131
Almond, 11, 2, 150
Ravin, 12, 3, 238

INFORMATION SYSTEMS

Interactive scheduling system
Large-scale interactive administrative system
Net change material requirements planning
Skylab terminal system performance analysis

Brewer, 10, 1, 62
Wimbrow, 10, 4, 260
Orlicky, 12, 1, 2
Mancini, 13, 2, 94

LANGUAGES

Code-generation for large-language compilers
Automatic generation of test cases
Formal description of programming languages
Interactive computer user behavior

Elson, 9, 3, 167
Hanford, 9, 4, 242
Neuhold, 10, 2, 86
Boies, 13, 1, 2

MANAGEMENT METHODS

Modeling for computer center planning
Chief programmer team
Accounting control of data processing
Management business simulation in APL
Scientific computing service evaluation
Net change material requirements planning
Concepts of financial models
Financial planning tools and techniques
Planning-data systems
Financial modeling on small systems
Interactive simulation for banking
Forecasting techniques
Interactive graphics system for business decisions
Centralization or dispersion of computing facilities
Skylab terminal system performance analysis

Hanssmann, 10, 4, 305
Baker, 11, 1, 56
Rettus, 11, 1, 74
Wahi, 11, 2, 169
Streeter, 11, 3, 219
Orlicky, 12, 1, 2
Kingston, 12, 2, 113
Dzielinski, 12, 2, 126
Lande, 12, 2, 145
Gordon, 12, 2, 161
Brown, 12, 2, 172
Aiso, 12, 2, 187
Ravin, 12, 3, 238
Streeter, 12, 3, 283
Mancini, 13, 2, 94

MATHEMATICAL METHODS

A model of floating buffering
Compiler assignment of data items to registers
Application of formal logic
FORTRAN extended-precision library
Programming for economic lot-sizes
Analysis of free-storage algorithms

Woodrum, 9, 2, 118
Day, 9, 4, 281
Allen, 10, 1, 2
Kuki, 10, 1, 39
Gorenstein, 10, 3, 232
Margolin, 10, 4, 283

Large-problem computation and display
Numerical control for complex surfaces
Using a random number generator
Forecasting techniques
Probability for system design

Fromm, 11, 1, 41
Almond, 11, 2, 150
Rechtschaffen, 11, 3, 255
Aiso, 12, 2, 187
Allen, 13, 4, 325

MICROPROGRAMMING

Readings in microprogramming

Davies, 11, 1, 16

NETWORKS

Interactive-batch network evaluation
Protocol for a computer network
Describing data in computer networks
Centralization or dispersion of computing facilities
Synchronous data link control

Hobgood, 11, 1, 2
McKay, 12, 1, 94
Fredericksen, 12, 3, 257
Streeter, 12, 3, 283
Donnan, 13, 2, 140

OPERATING SYSTEMS

On-line inquiry under small operating system
A heuristic approach to task dispatching
A virtual machine time-sharing system
Interactive-batch network evaluation
Structure of virtual storage operating systems
 Influences of dynamic address translation
 OS/VS2-2 concepts and philosophies
 DOS/VS architecture and design
Advanced function extended with multiprocessing
Multiprocessing programming design
OS/VS1 concepts and philosophies
Operating system integrity in OS/VS2
Job entry subsystem of OS/VS1
OS/VS2 system resources manager
Optimizing program placement

Darga, 9, 1, 2
Ryder, 9, 3, 189
Meyer, 9, 3, 199
Hobgood, 11, 1, 2

Auslander, 12, 4, 368
Scherr, 12, 4, 382
Birch, 12, 4, 401
MacKinnon, 13, 1, 32
Arnold, 13, 1, 60
Wheeler, 13, 3, 213
McPhee, 13, 3, 230
Baily, 13, 3, 253
Lynch, 13, 4, 274
Ryder, 13, 4, 292

PERFORMANCE EVALUATION

Time-sharing performance criteria and measurement
Scientific computing service evaluation
Queuing using a random number generator
User program performance in virtual storage
Experimental evaluation of system performance
Interactive computer user behavior
Skylab terminal system performance analysis
Evaluation of storage hierarchies
OS/VS2 system resources manager
Probability for system design

Bard, 10, 3, 193
Streeter, 11, 3, 219
Rechtschaffen, 11, 3, 255
Morrison, 12, 3, 216
Bard, 12, 3, 302
Boies, 13, 1, 2
Mancini, 13, 2, 94
Gecsei, 13, 2, 163
Lynch, 13, 4, 274
Allen, 13, 4, 325

PROGRAMMING DOCUMENTATION AND TECHNIQUES

Automatic generation of test cases
Formal description of programming languages
A guide to programming tools and techniques
User program performance in virtual storage
Structured design

Hanford, 9, 4, 242
Neuhold, 10, 2, 86
Pomeroy, 11, 3, 234
Morrison, 12, 3, 216
Stevens, 13, 2, 115

QUEUING

Single-server queuing in computing systems
Analysis of the machine interference model
Queuing using a random number generator
Evaluation of storage hierarchies
Probability for system design

Chang, 9, 1, 36
Ferdinand, 10, 2, 129
Rechtschaffen, 11, 3, 255
Gecsei, 13, 2, 163
Allen, 13, 4, 325

REAL-TIME SYSTEMS

- Trajectory control programs Quarles, 9, 1, 12
- Time-sharing performance criteria and measurement Bard, 10, 3, 193
- Real-time traffic flow optimization Black, 10, 3, 217
- Large-scale interactive administrative system Wimbrow, 10, 4, 260
- A real-time check-clearing system Banham, 11, 4, 329
- Experimental evaluation of system performance Bard, 12, 3, 302
- Skylab terminal system performance analysis Mancini, 13, 2, 94

SIMULATION

- Interactive flight program simulator Jacobs, 9, 2, 145
- Model of paging system performance Shedler, 10, 2, 113
- Modeling for computer center planning Hanssmann, 10, 4, 305
- Management business simulation in APL Wahi, 11, 2, 169
- Channel and direct access architecture Brown, 11, 3, 186
- Queuing using a random number generator Rechtschaffen, 11, 3, 255
- Techniques for developing analytic models Anthony, 11, 4, 316
- Concepts of financial models Kingston, 12, 2, 113
- Financial modeling on small systems Gordon, 12, 2, 161
- Interactive simulation for banking Brown, 12, 2, 172
- Forecasting techniques Aiso, 12, 2, 187
- Direct-access device simulation Nahouraii, 13, 1, 19
- Skylab terminal system performance analysis Mancini, 13, 2, 94
- Evaluation of storage hierarchies Gecsei, 13, 2, 163
- Probability for system design Allen, 13, 4, 325

SORTING AND MERGING

- A model of floating buffering Woodrum, 9, 2, 118
- Guided bibliography to sorting Lorin, 10, 3, 244

STORAGE SYSTEMS

- Evaluation techniques for storage hierarchies Mattson, 9, 2, 78
- A virtual machine time-sharing system Meyer, 9, 3, 199
- Model of paging system performance Shedler, 10, 2, 113
- Program restructuring for virtual memory Hatfield, 10, 3, 168
- Analysis of free-storage algorithms Margolin, 10, 4, 283
- Virtual storage and machine concepts Parmelee, 11, 2, 99
- Virtual storage in a scientific environment Callaway, 11, 3, 200
- Structure of virtual storage operating systems
 - Influences of dynamic address translation Auslander, 12, 4, 368
 - OS/VS2-2 concepts and philosophies Scherr, 12, 382
 - DOS/VS architecture and design Birch, 12, 4, 401
- Skylab terminal system performance analysis Mancini, 13, 2, 94
- Evaluation of storage hierarchies Gecsei, 13, 2, 163
- Optimizing program placement Ryder, 13, 4, 292

TELEPROCESSING

- Protocol for a computer network McKay, 12, 1, 94
- Describing data in computer networks Fredericksen, 12, 3, 257
- Centralization or dispersion of computing facilities Streeter, 12, 3, 283
- Skylab terminal system performance analysis Mancini, 13, 2, 94
- Synchronous data link control Donnan, 13, 2, 140