

Following is an index by author and an index by subject of all papers that have been published in the *IBM Systems Journal* since 1974. A composite index that combines these indexes with the abstracts of all of the papers listed in the indexes is available from IBM branch offices for \$2.00 each as order form number G321-5143. Order numbers for reprints of individual papers are included in the main entry for each paper in the Author Index.

Indexes for 1970 through 1974 appeared in Volume 13, Number 4 (1974), and indexes for 1962 through 1969 appeared in Volume 8, Number 4 (1969). Issues and reprints of papers covered by these previously published indexes are not available from IBM.

Author index 1975-1981

- ALBRECHT, H. R., and K. D. Ryder, The Virtual Telecommunications Access Method: A Systems Network Architecture perspective, **15**, 1, 53 (1976); G321-5027.
- ALBRECHT, H. R., and L. C. Thomason, I/O facilities of the Distributed Processing Programming Executive (DPPX), **18**, 4, 526 (1979); G321-5108.
- ALFONSECA, M., M. L. Tavera, and R. Casajuana, An APL interpreter and system for a small computer, **16**, 1, 18 (1977); G321-5043.
- ALLEN, A. L., Elements of queuing theory for system design, **14**, 2, 161 (1975); G321-5009.
- AHUJA, V., Routing and flow control in Systems Network Architecture, **18**, 2, 298 (1979); G321-5097.
- ANDERSON, H. A., JR., M. Reiser, and G. L. Galati, Tuning a virtual storage system, **14**, 3, 246 (1975); G321-5013.
- ANTONELLI, D. C., The role of the operator in the Supermarket and Retail Store Systems, **14**, 1, 35 (1975); G321-5003.
- ASTRAHAN, M. M., see Blasgen, M. W., **20**, 1, 41 (1981).
- ATTANASIO, C. R., P. W. Markstein, and R. J. Phillips, Penetrating an operating system: a study of VM/370 integrity, **15**, 1, 102 (1976); G321-5029.
- ATTANASIO, C. R., Virtual Control Storage—security measures in VM/370, **18**, 1, 93 (1979); G321-5088.
- BAKER, C. T., Logical distribution of applications and data, **19**, 2, 171 (1980); G321-5121.
- BARD, Y., Performance analysis of virtual memory time-sharing systems, **14**, 4, 366 (1975); G321-5022.
- BELADY, L. A., and M. M. Lehman, A model of large program development, **15**, 3, 225 (1976); G321-5035.
- BELADY, L. A., C. J. Evangelisti, and L. R. Power, GREENPRINT: A graphic representation of structured programs, **19**, 4, 542 (1980); G321-5137.
- BERETVAS, T., Performance tuning in OS/VS2 MVS, **17**, 3, 290 (1978); G321-5077.
- BERK, M. A., C. W. Dunbar, and G. C. Hobson, Design and performance considerations for the Retail Store System, **14**, 1, 64 (1975); G321-5005.
- BIRD, R. A., and C. A. Hofmann, Systems management, **19**, 1, 140 (1980); G321-5120.
- BJORK, L. A., JR., Generalized audit trail requirements and concepts for data base applications, **14**, 3, 229 (1975); G321-5012.
- BLASGEN, M. W., and K. P. Eswaran, Storage and access in relational data bases, **16**, 4, 363 (1977); G321-5058.
- BLASGEN, M. W., M. M. Astrahan, D. D. Chamberlin, J. N. Gray, W. F. King, B. G. Lindsay, R. A. Lorie, J. W. Mehl, T. G. Price, G. R. Putzolu, M. Schkolnick, P. G. Selinger, D. R. Slutz, H. R. Strong, I. L. Traiger, B. W. Wade, and R. A. Yost, System R: An architectural overview, **20**, 1, 41 (1981); G321-5140.
- BLEHER, J. H., P. G. Caspers, H. H. Henn, and K. Maerker, A graphic interactive application monitor, **19**, 3, 382 (1980); G321-5132.
- BRANSCOMB, L. M., Computing and communications—A perspective of the evolving environment, **18**, 2, 189 (1979); G321-5092.
- BRONNER, L., Overview of the capacity planning process for production data processing, **19**, 1, 4 (1980); G321-5113.
- BRYANT, P., F. W. Giesin, Jr., and R. M. Hayes, Experiments in line quality monitoring, **15**, 2, 124 (1976); G321-5030.
- BURCHI, R. S., Interactive graphics today, **19**, 3, 292 (1980); G321-5126.

- CALLAWAY, P. H., Performance measurement tools for VM/370, **14**, 2, 134 (1975); *G321-5008*.
- CAMPENNI, R. D., see Leach, J. R., **19**, 1, 120 (1980).
- CARLSON, E. D., see Weller, D. L., **19**, 3, 314 (1980).
- CASAJUANA, R., see Alfonseca, M., **16**, 1, 18 (1977).
- CASPERS, P. G., see Bleher, J. H., **19**, 3, 382 (1980).
- CHAMBERLIN, D. D., see Blasgen, M. W., **20**, 1, 41 (1981).
- CHEN, R., H. Crowder, and E. L. Johnson, Solving the installation scheduling problem using mixed integer linear programming, **17**, 1, 82 (1978); *G321-5065*.
- CHIU, W. W., and W. Chow, A performance model of MVS, **17**, 4, 444 (1978); *G321-5083*.
- CHOW, W., see Chiu, W. W., **17**, 4, 444 (1978).
- COLE, H., and A. A. Guido, The IBM 5100 and the Research Device Coupler—A personal laboratory automation system, **16**, 1, 41 (1977); *G321-5044*.
- CONSIDINE, J. P., and J. J. Myers, MARC: MVS archival storage and recovery program, **16**, 4, 378 (1977); *G321-5059*.
- COOPER, J. C., A capacity planning methodology, **19**, 1, 28 (1980); *G321-5114*.
- CORR, F. P., and D. H. Neal, SNA and emerging international standards, **18**, 2, 244 (1979); *G321-5095*.
- CRABTREE, R. P., Job networking, **17**, 3, 206 (1978); *G321-5071*.
- CROWDER, H., see Chen, R., **17**, 1, 82 (1978).
- CULLUM, P. G., The transmission subsystem in Systems Network Architecture, **15**, 1, 24 (1976); *G321-5026*.
- DANIEL, C. J., see Heyne, G. F., **16**, 4, 344 (1977).
- DAVIES, C. T., JR., Data processing spheres of control, **17**, 2, 179 (1978); *G321-5070*.
- DE FRIETAS, S. L., and P. J. Lavelle, A method for the time analysis of programs, **17**, 1, 26 (1978); *G321-5062*.
- DESOSA, M. R., Electronic information interchange in an office environment, **20**, 1, 4 (1981); *G321-5138*.
- DOHERTY, W. J., and R. A. Kelisky, Managing VM/CMS systems for user effectiveness, **18**, 1, 143 (1979); *G321-5090*.
- DONOVAN, J. J., and S. E. Madnick, Hierarchical approach to computer system integrity, **14**, 2, 188 (1975); *G321-5010*.
- DUKE, M. O., Testing in a complex systems environment, **14**, 4, 353 (1975); *G321-5021*.
- DUNBAR, C. W., see Berk, M. A., **14**, 1, 64 (1975).
- DYER, M., The management of software engineering, Part IV: Software development practices, **19**, 4, 451 (1980); *G321-5133*.
- EADE, D. J., P. Homan, and J. H. Jones, CICS/VS and its role in Systems Network Architecture, **16**, 3, 258 (1977); *G321-5054*.
- EHRSAM, W. F., S. M. Matyas, C. H. Meyer, and W. L. Tuchman, A cryptographic key management scheme for implementing the Data Encryption Standard, **17**, 2, 106 (1978); *G321-5066*.
- ENGEL, G. H., J. Groppuso, R. A. Lowenstein, and W. G. Traub, An office communications system, **18**, 3, 402 (1979); *G321-5102*.
- ESWARAN, K. P., see Blasgen, M. W., **16**, 4, 363 (1977).
- EVANGELISTI, C. J., see Belady, L. A., **19**, 4, 542 (1980).
- FAGAN, M. E., Design and code inspections to reduce errors in program development, **15**, 3, 182 (1976); *G321-5033*.
- FELIX, C. P., see Walston, C. E., **16**, 1, 54 (1977).
- FERNANDEZ, E. B., see Wood, C., **19**, 2, 229 (1980).
- FITZGERALD, A. K., and B. F. Goodrich, Data management for the Distributed Processing Programming Executive (DPPX), **18**, 4, 547 (1979); *G321-5109*.
- FORD, J. B., Enhanced problem determination capability for teleprocessing, **17**, 3, 276 (1978); *G321-5075*.
- FRAZER, W. D., Potential technology implications for computers and telecommunications in the 1980s, **18**, 2, 333 (1979); *G321-5099*.
- FRIEDMAN, H. P., and G. Waldbaum, Evaluating system changes under uncontrolled workloads: a case study, **14**, 4, 340 (1975); *G321-5020*.
- GALATI, G. L., see Anderson, H. A., Jr., **14**, 3, 246 (1975).
- GHANEM, S. B., Computer center optimization by a pricing-priority policy, **14**, 3, 272 (1975); *G321-5015*.
- GIDDINGS, G. M., see Weller, D. L., **19**, 3, 314 (1980).
- GIESIN, F. W., JR., see Bryant, P., **15**, 2, 124 (1976).
- GLADNEY, H. M., E. L. Worley, and J. J. Myers, An access control mechanism for computer resources, **14**, 3, 212 (1975); *G321-5011*.

- GLADNEY, H. M., D. L. Johnson, and R. L. Stone, Computer installation accounting, **14**, 4, 314 (1975); *G321-5019*.
- GLADNEY, H. M., see Raimondi, D. L., **15**, 1, 81 (1976).
- GLADNEY, H. M., Administrative control of computing service, **17**, 2, 151 (1978); *G321-5069*.
- GOODRICH, B. F., see Fitzgerald, A. K., **18**, 4, 547 (1979).
- GORDON, R. D., The Modular Application Customizing System, **19**, 4, 521 (1980); *G321-5136*.
- GRAVINA, C. M., National Westminster Bank mass storage archiving, **17**, 4, 344 (1978); *G321-5079*.
- GRAY, J. P., and T. B. McNeill, SNA multiple-system networking, **18**, 2, 263 (1979); *G321-5096*.
- GRAY, J. N., see Blasgen, M. W., **20**, 1, 41 (1981).
- GREEN, P. E., An introduction to network architecture and protocols, **18**, 2, 202 (1979); *G321-5093*.
- GROPPUSO, J., see Engel, G. H., **18**, 3, 402 (1979).
- GRUHN, A. M., and A. C. Hohl, A research perspective on computer-assisted office work, **18**, 3, 432 (1979); *G321-5103*.
- GUIDO, A. A., see Cole, H., **16**, 1, 41 (1977).
- HAGAMEN, W. D., D. J. Linden, K. F. Mai, S. M. Newell, and J. C. Weber, A program generator, **14**, 2, 102 (1975); *G321-5007*.
- HALPERN, P., and J. W. Rettberg, User-definable software applied to a real-time ambient air quality monitoring system, **20**, 1, 86 (1981); *G321-5142*.
- HALSEY, J. R., L. E. Hardy, and L. F. Powning, Public data networks: Their evolution, interfaces, and status, **18**, 2, 223 (1979); *G321-5094*.
- HANDELMAN, S. W., A high-resolution computer graphics system, **19**, 3, 356 (1980); *G321-5130*.
- HARDY, L. E., see Halsey, J. R., **18**, 2, 223 (1979).
- HARRISON, E. S., Distributed processing communications software support for operation within an SNA network, **19**, 2, 192 (1980); *G321-5122*.
- HARTMANN, T. C., see Hendricks, E. C., **18**, 1, 111 (1979).
- HASSITT, A., and L. E. Lyon, An APL emulator on System/370, **15**, 4, 358 (1976); *G321-5041*.
- HAYES, R. M., see Bryant, P., **15**, 2, 124 (1976).
- HENDRICKS, E. C., and T. C. Hartmann, Evolution of a virtual machine subsystem, **18**, 1, 111 (1979); *G321-5089*.
- HENN, H. H., see Bleher, J. H., **19**, 3, 382 (1980).
- HEYNE, G. F., and C. J. Daniel, Design techniques for a user controlled DB/DC system, **16**, 4, 344 (1977); *G321-5057*.
- HIPPERT, R. O., L. R. Palounek, J. Provetero, and R. O. Skatrud, Reliability, availability, and serviceability design considerations for the Supermarket and Retail Store Systems, **14**, 1, 81 (1975); *G321-5006*.
- HOBGOOD, W. S., The role of the Network Control Program in Systems Network Architecture, **15**, 1, 39 (1976); *G321-5025*.
- HOBSON, G. C., see Berk, M. A., **14**, 1, 64 (1975).
- HOCHWELLER, G., see Raimondi, D. L., **15**, 1, 81 (1976).
- HOFMANN, C. A., see Bird, R. A., **19**, 1, 140 (1980).
- HOHL, A. C., see Gruhn, A. M., **18**, 3, 432 (1979).
- HOLLEY, L. H., R. P. Parmelee, C. A. Salisbury, and D. N. Saul, VM/370 asymmetric multiprocessing, **18**, 1, 47 (1979); *G321-5086*.
- HOMAN, P., see Eade, D. J., **16**, 3, 258 (1977).
- HUBBARD, G. U., see Raver, N., **16**, 3, 287 (1977).
- HUTH, H. T., see McEnroe, P. V., **14**, 1, 3 (1975).
- JENSEN, R. M., A formal approach for communication between logically isolated virtual machines, **18**, 1, 71 (1979); *G321-5087*.
- JOHNSON, D. L., see Gladney, H. M., **14**, 4, 314 (1975).
- JOHNSON, E. L., see Chen, R., **17**, 1, 82 (1978).
- JONES, A. L., see Niehoff, W. H., **19**, 3, 367 (1980).
- JONES, A. U., A user-oriented data-base retrieval system, **16**, 1, 4 (1977); *G321-5042*.
- JONES, J. H., see Eade, D. J., **16**, 3, 258 (1977).
- JONES, T. C., Measuring programming quality and productivity, **17**, 1, 39 (1978); *G321-5063*.
- KATZ, S., L. J. Risan, and M. Rodeh, A system for constructing linear programming models, **19**, 4, 505 (1980); *G321-5135*.
- KELISKY, R. P., see Doherty, W. J., **18**, 1, 143 (1979).

- KIELY, S. C., An operating system for distributed processing—DPPX, **18**, 4, 507 (1979); *G321-5107*.
- KING, W. F., see Blasgen, M. W., **20**, 1, 41 (1981).
- KONHEIM, A. G., M. H. Mack, R. K. McNeill, B. Tuckerman, and G. Waldbaum, The IPS cryptographic programs, **19**, 2, 253 (1980); *G321-5125*.
- KOSTER, L. R., see McCrossin, J. M., **17**, 3, 260 (1978).
- KRAEMER, W., Performance investigations with a DOS/VS-based operating system model, **17**, 4, 409 (1978); *G321-5082*.
- LAIRD, J. A., The Power Profile—An installation management tool, **14**, 3, 264 (1975); *G321-5014*.
- LAURER, G. J., see Savir, D., **14**, 1, 16 (1975).
- LAVELLE, P. J., see de Freitas, S. L., **17**, 1, 26 (1978).
- LEACH, J. R., and R. D. Campenni, A sidestream approach using a small processor as a tool for managing communication systems, **19**, 1, 120 (1980); *G321-5119*.
- LEHMAN, M. M., see Belady, L. A., **15**, 3, 225 (1976).
- LENNON, R. E., Cryptography architecture for information security, **17**, 2, 138 (1978); *G321-5068*.
- LEWIS, L. J., Service levels: A concept for the user and the computer center, **15**, 4, 328 (1976); *G321-5040*.
- LINDEN, D. J., see Hagamen, W. D., **14**, 2, 102 (1975).
- LINDSAY, B. G., see Blasgen, M. W., **20**, 1, 41 (1981).
- LINGER, R. C., The management of software engineering, Part III: Software design practices, **19**, 4, 432 (1980); *G321-5133*.
- LORIE, R. A., see Blasgen, M. W., **20**, 1, 41 (1981).
- LORIN, H., Distributed processing: An assessment, **18**, 4, 582 (1979); *G321-5111*.
- LOWENSTEIN, R. A., see Engel, G. H., **18**, 3, 402 (1979).
- LYON, L. E., see Hassitt, A., **15**, 4, 358 (1976).
- MACK, M. H., see Konheim, A. G., **19**, 2, 253 (1980).
- MACKINNON, R. A., see Seawright, L. H., **18**, 1, 4 (1979).
- MACKINNON, R. A., The changing virtual machine environment: Interfaces to real hardware, virtual hardware, and other virtual machines, **18**, 1, 18 (1979); *G321-5085*.
- MADNICK, S. E., see Donovan, J. J., **14**, 2, 188 (1975).
- MAERKER, K., see Bleher, J. H., **19**, 3, 382 (1980).
- MAI, K. F., see Hagamen, W. D., **14**, 2, 102 (1975).
- MAJOR, J. B., Processor, I/O path, and DASD configuration capacity, **20**, 1, 63 (1981); *G321-5141*.
- MARKSTEIN, P. W., see Attanasio, C. R., **15**, 1, 102 (1976).
- MARTIN, R. W., see Raimondi, D. L., **15**, 1, 81 (1976).
- MATYAS, S. M., see Ehram, W. F., **17**, 2, 106 (1978).
- MATYAS, S. M., and C. H. Meyer, Generation, distribution, and installation of cryptographic keys, **17**, 2, 126 (1978); *G321-5067*.
- MCCROSSIN, J. M., R. P. O'Hara, and L. R. Koster, A time-sharing display terminal session manager, **17**, 3, 260 (1978); *G321-5074*.
- MCCUE, G. M., IBM's Santa Teresa Laboratory—Architectural design for program development, **17**, 1, 4 (1978); *G321-5061*.
- MCENROE, P. V., H. T. Huth, E. A. Moore, and W. W. Morris III, Overview of the Supermarket System and the Retail Store System, **14**, 1, 3 (1975); *G321-5001*.
- MCFADYEN, J. H., Systems Network Architecture: An overview, **15**, 1, 4 (1975); *G321-5024*.
- MCGEE, W. C., The information management system IMS/VS. Part I, General structure and operation, **16**, 2, 84, *G321-5046*; Part II, Data base facilities, **16**, 2, 96, *G321-5047*; Part III, Batch processing facilities, **16**, 2, 123, *G321-5048*; Part IV, Data communication facilities, **16**, 2, 136, *G321-5049*; Part V, Transaction processing facilities, **16**, 2, 148 (1977); *G321-5050*.
- MCMANIGAL, D. F., and D. A. Stevenson, Architecture of the IBM 3277 Graphics Attachment, **19**, 3, 331 (1980); *G321-5128*.
- MCNEILL, R. K., see Konheim, A. G., **19**, 2, 253 (1980).
- MCNEILL, T. B., see Gray, J. P., **18**, 2, 263 (1979).
- MEHL, J. W., see Blasgen, M. W., **20**, 1, 41 (1981).
- METZ, W. C., JR., and D. Savir, Store performance studies for the Supermarket System, **14**, 1, 46 (1975); *G321-5004*.
- MEYER, C. H., see Ehram, W. F., **17**, 2, 106 (1978); see also Matyas, S. M., **17**, 2, 126 (1978).
- MILLS, H. D., The management of software engineering, Part I: Principles of software engineering, **19**, 4, 414 (1980); *G321-5133*.
- MISHELEVICH, D. J., and D. Van Slyke, Application development system: The soft-

- ware architecture of the IBM Health Care Support/DL/1-Patient Care System, **19**, 4, 478 (1980); *G321-5134*.
- MOORE, E. A., see McEnroe, P. V., **14**, 1, 3 (1975).
- MOORE, R. S., Evolution of a laboratory communication network, **18**, 2, 315 (1979); *G321-5098*.
- MORRIS, W. W., III, see McEnroe, P. V., **14**, 1, 3 (1975).
- MORRISON, J. P., Data Stream Linkage Mechanism, **17**, 4, 383 (1978); *G321-5081*.
- MUSGRAVE, J. F., Experiments in computer-aided graphic expression, **17**, 3, 241 (1978); *G321-5073*.
- MYERS, G. J., Composite design facilities of six programming languages, **15**, 3, 212 (1976); *G321-5034*.
- MYERS, J. J., see Gladney, H. M., **14**, 3, 212 (1975); see also Considine, J. P., **16**, 4, 378 (1977).
- NEAL, D. H., see Corr, F. P., **18**, 2, 244 (1979).
- NEWELL, S. M., see Hagamen, W. D., **14**, 2, 102 (1975).
- NGUYEN, H. C., A. Ockene, R. Revell, and W. J. Skwish, The role of detailed simulation in capacity planning, **19**, 1, 81 (1980); *G321-5115*.
- NIEHOFF, W. H., and A. L. Jones, An APL approach to presentation graphics, **19**, 3, 367 (1980); *G321-5131*.
- O'HARA, R. P., see McCrossin, J. M., **17**, 3, 260 (1978).
- O'NEILL, D., The management of software engineering, Part II: Software engineering program, **19**, 4, 421 (1980); *G321-5133*.
- OCKENE, A., see Nguyen, H. C., **19**, 1, 81 (1980).
- PALERMO, F. P., see Weller, D. L., **19**, 3, 314 (1980).
- PALOUNEK, L. R., see Hippert, R. O., **14**, 1, 81 (1975).
- PARMELEE, R. P., see Holley, L. H., **18**, 1, 47 (1979).
- PHILLIPS, G. H., see Simpson, R. O., **17**, 3, 221 (1978).
- PHILLIPS, R. J., see Attanasio, C. R., **15**, 1, 102 (1976).
- POWER, L. R., see Belady, L. A., **19**, 4, 542 (1980).
- POWNING, L. F., see Halsey, J. R., **18**, 2, 223 (1979).
- PRICE, T. G., see Blasgen, M. W., **20**, 1, 41 (1981).
- PROVETERO, J., see Hippert, R. O., **14**, 1, 81 (1975).
- PUTZOLU, G. R., see Blasgen, M. W., **20**, 1, 41 (1981).
- QUINNAN, R. E., The management of software engineering, Part V: Software engineering management practices, **19**, 4, 466 (1980); *G321-5133*.
- RAIMONDI, D. L., H. M. Gladney, G. Hochweller, R. W. Martin, and L. L. Spencer, LABS/7—a distributed real-time operating system, **15**, 1, 81 (1976); *G321-5028*.
- RAVER, N., and G. U. Hubbard, Automated logical data base design: Concepts and applications, **16**, 3, 287 (1977); *G321-5055*.
- REISER, M., see Anderson, H. A., Jr., **14**, 3, 246 (1975).
- REISER, M., Interactive modeling of computer systems, **15**, 4, 309 (1976); *G321-5039*.
- RETTBERG, J. W., see Halpern, P., **20**, 1, 86 (1981).
- REVELL, R., see Nguyen, H. C., **19**, 1, 81 (1980).
- RISMAN, L. J., see Katz, S., **19**, 4, 505 (1980).
- RODEH, M., see Katz, S., **19**, 4, 505 (1980).
- ROGERS, J. G., Structured programming for virtual storage systems, **14**, 4, 385 (1975); *G321-5023*.
- RYDER, K. D., see Albrecht, H. R., **15**, 1, 53 (1976).
- SALISBURY, C. A., see Holley, L. H., **18**, 1, 47 (1979).
- SANDBERG, G., A primer on relational data base concepts, **20**, 1, 24 (1981); *G321-5139*.
- SARMA, K. S., An input-output econometric model, **16**, 4, 398 (1977); *G321-5060*.
- SAUL, D. N., see Holley, L. H., **18**, 1, 47 (1979).
- SAVIR, D., and G. J. Laurer, The characteristics and decodability of the Universal Product Code, **14**, 1, 16 (1975); *G321-5002*.
- SAVIR, D., see Metz, W. C., Jr., **14**, 1, 46 (1975).
- SCHARDT, R. M., An MVS tuning approach, **19**, 1, 102 (1980); *G321-5118*.
- SCHERR, A. L., Distributed data processing, **17**, 4, 324 (1978); *G321-5078*.
- SCHILLER, D. C., System capacity and performance evaluation, **19**, 1, 46 (1980); *G321-5115*.
- SCHKOLNICK, M., see Blasgen, M. W., **20**, 1, 41 (1981).
- SEAMAN, P. H., Modeling considerations for predicting performance of CICS/VS systems, **19**, 1, 68 (1980); *G321-5116*.
- SEAWRIGHT, L. H., and R. A. MacKinnon, VM/370—a study of multiplicity and usefulness, **18**, 1, 4 (1979); *G321-5084*.

- SELINGER, P. G., see Blasgen, M. W., **20**, 1, 41 (1981).
- SENKO, M. E., Data structures and data accessing in data base systems past, present, future, **16**, 3, 208 (1977); *G321-5053*.
- SHAH, M. J., Automatic programming for energy management using sensor based computers, **18**, 3, 457 (1979); *G321-5104*.
- SHEPHERD, B. J., Experimental page makeup of text with graphics on a raster printer, **19**, 3, 345 (1980); *G321-5129*.
- SIMPSON, R. O., and G. H. Phillips, Network job entry facility for JES2, **17**, 3, 221 (1978); *G321-5072*.
- SIWIEC, J. E., A high-performance DB/DC system; **16**, 2, 169 (1977); *G321-5051*.
- SKATRUD, R. O., see Hippert, R. O., **14**, 1, 81 (1975).
- SKWISH, W. J., see Nguyen, H. C., **19**, 1, 81 (1980).
- SLATE, L., and K. Spielberg, The Extended Control Language of MPSX/370 and possible applications, **17**, 1, 64 (1978); *G321-5064*.
- SLUTZ, D. R., see Blasgen, M. W., **20**, 1, 41 (1981).
- SMEDLEY, B. S., The development of software systems to aid in physical planning, **17**, 4, 359 (1978); *G321-5080*.
- SPENCER, L. L., see Raimondi, D. L., **15**, 1, 81 (1976).
- SPIELBERG, K., see Slate, L., **17**, 1, 64 (1978).
- STAY, J. F., HIPO and integrated program design, **15**, 2, 143 (1976); *G321-5031*.
- STEVENSON, D. A., see McManigal, D. F., **19**, 3, 331 (1980).
- STEWART, H. M., Performance analysis of complex communications systems, **18**, 3, 356 (1979); *G321-5100*.
- STONE, R. L., see Gladney, H. M., **14**, 4, 314 (1975).
- STREETER, D. N., Productivity of computer-dependent workers, **14**, 3, 292 (1975); *G321-5016*.
- STRONG, H. R., see Blasgen, M. W., **20**, 1, 41 (1981).
- SUMMERS, R. C., see Wood, C., **19**, 2, 229 (1980).
- TAVERA, M. L., see Alfonseca, M., **16**, 1, 18 (1977).
- TETZLAFF, W. H., State sampling of interactive VM/370 users, **18**, 1, 164 (1979); *G321-5091*.
- THOMASON, L. C., see Albrecht, H. R., **18**, 4, 526 (1979).
- TODD, S. J. P., The Peterlee Relational Test Vehicle—a system overview, **15**, 4, 285 (1976); *G321-5038*.
- TRAIGER, I. L., see Blasgen, M. W., **20**, 1, 41 (1981).
- TRAUB, W. G., see Engel, G. H., **18**, 3, 402 (1979).
- TUCHMAN, W. L., see Ehrsam, W. F., **17**, 2, 106 (1978).
- TUCKERMAN, B., see Konheim, A. G., **19**, 2, 253 (1980).
- VAN LEER, P., Top-down development using a program design language, **15**, 2, 155 (1976); *G321-5032*.
- VAN SLYKE, D., see Mishelevich, D. J., **19**, 4, 478 (1980).
- WADE, B. W., see Blasgen, M. W., **20**, 1, 41 (1981).
- WALDBAUM, G., see Friedman, H. P., **14**, 4, 340 (1975); *see also* Konheim, A. G., **19**, 2, 253 (1980).
- WALSTON, C. E., and C. P. Felix, A method of programming measurement and estimation, **16**, 1, 54 (1977); *G321-5045*.
- WATERS, F. C. H., Design of the IBM 8100 Data Base and Transaction Management System—DTMS, **18**, 4, 565 (1979); *G321-5110*.
- WEBER, J. C., see Hagamen, W. D., **14**, 2, 102 (1975).
- WEINGARTEN, R. A., An integrated approach to centralized communications network management, **18**, 4, 484 (1979); *G321-5106*.
- WELLER, D. L., E. D. Carlson, G. M. Giddings, F. P. Palermo, R. Williams, and S. N. Zilles, Software architecture for graphical interaction, **19**, 3, 314 (1980); *G321-5127*.
- WILLIAMS, R., see Weller, D. L., **19**, 3, 314 (1980).
- WOOD, C., E. B. Fernandez, and R. C. Summers, Data base security: requirements, policies, and models, **19**, 2, 229 (1980); *G321-5124*.
- WORLEY, E. L., see Gladney, H. M., **14**, 3, 212 (1975).
- YOST, R. A., see Blasgen, M. W., **20**, 1, 41 (1981).
- YUVAL, A., System contention analysis—An alternate approach to system tuning, **19**, 2, 208 (1980); *G321-5123*.
- ZIEGLER, K., JR., A distributed information system study, **18**, 3, 374 (1979); *G321-5101*.
- ZILLES, S. N., see Weller, D. L., **19**, 3, 314 (1980).
- ZLOOF, M. M., Query-by-Example: a data base language, **16**, 4, 324 (1977); *G321-5056*.