This index is divided into two sections — a subject index and an author index, both arranged alphabetically — covering material that appeared in IEEE Software in 1987 (Vol. 4, Nos. 1-6). The exact titles appear in the author index entries; the subject index may use the title or a description in its entries. In the subject index, references to departmental material are in parentheses after the title or description; in the author index, they precede the title. References to corrections and comments appear in the author index entries and are marked with a dagger (†) in the subject index. Coauthors are listed only in the author index; a + marks coauthors in the subject index entries.

Subject index

A

Ada
life-cycle analysis of Ada project. Baskette, Jerry Harvey, S-M Jan 87 40-47.†
VIPS, visual debugger for testing Ada programs. Isoda, Sadahiro, +, S-M Mar 87 18-19.

Artificial Intelligence also see Expert systems.

B

Book reviews


Fourth and Fifth Generation Programming Languages (Chorafas, D. N.; 1986). Chad, Donald D., S-M May 87 102.

Computer communication also see Networks
Watson, hardware/software product that turns IBM PC or compatible into voice messaging system (New Product Reviews). Lewis, David J., S-M Jan 87 74-75.

Computer interfaces also see Human factors

Computer programming profession
programmers' tax status up for debate (Soft News). S-M Sep 87 91.

Copyright issues see Software protection

C

CAD/CAM/CAE see Design automation software
CASE see Software design/development
Compilers
Microsoft's C compiler gets even better (Software Reviews). Howard III, Harvey L., +, S-M Sep 87 92-93.
Mix C Works, introductory C programming package (New Product Reviews). Goodall, Randy K., S-M Sep 87 94.
Telesoft Ada revision (Software Reviews). Oman, Paul, S-M Jul 87 89-90.
two software compilers by Microsoft providing Fortran for microcomputers (Software Reviews). Johnson, Michael P., S-M Nov 87 97-99.

Data communications see Networks

Database management systems
Clipper, facilities for creating and compiling database management programs based on dBase III (New Product Reviews).
Weisman, Gerald, S-M Jan 87 75.

Database systems
prototype operating system based on extended databases. Balzer, Robert M., S-M Nov 87 77-78.

Database systems, relational

Debugging
knowledge-based program debugging systems. Seviora, Rudolph E., S-M May 87 20-32.
VIPS, visual debugger for testing Ada programs _Booda_, Sadahiro, + , S-M May 87 9–19

**Decision-making**
Planning Tools, decision-support software (New Product Reviews). _Reisman, Sorel, S-M Jan 87 75_

**Design automation software**
CASE status (Soft News). _Butler, Janet, S-M Nov 87 94_
powerful CAD at low price (New Product Reviews). _Eckhouse, Richard, Jr., S-M Mar 87 81_
ultimate 3-D CAD system (New Product Reviews). _Eckhouse, Richard, Jr., S-M May 87 92_
upgrading to EGA graphics (New Product Reviews). _Eckhouse, Richard, Jr., S-M Mar 87 80_

**Desktop publishing**
desktop publishing steals show at Comdex (Soft News). _Grunan, Galen, S-M Jan 87 90–91_
laserware, memory-resident desktop publishing program (New Product Reviews). _Watson, Gerald, S-M Mar 87 84_
Lotus Manuscript document processor (New Product Reviews). _Grunan, Galen, S-M Sep 87 95_
MS-DOS programs for desktop publishing (Software Reviews). _Grunan, Galen, S-M Aug 87 70–77_
technical document publishing (Software Reviews). _Killian, Denice, S-M May 87 76_

**Distributed computing**
terprocess communication in Charlotte distributed operating system. _Artsy, Yeshayahu, + , S-M Jan 87 22–28_
interview with C. Gordon Bell of National Science Foundation on software research directions. _S-M Jul 87 102–104_
Mercury, multiuser distributed language-based environment for large software projects. _Kaiser, Gail E., + , S-M Nov 87 58–67_
parallel software configuration management for networks. _Leblang, David B., + , S-M Nov 87 28–35_
Taskview multitasking environment for PCs (New Product Reviews). _Reisman, Sorel, S-M Nov 87 101_

**Distributed database systems**
Allegro environment for distributed, object-oriented databases. _Linton, Mark A., S-M Nov 87 70–76_

**Document handling** also see Desktop publishing, Text processing
Lotus Manuscript document processor (New Product Reviews). _Grunan, Galen, S-M Sep 87 95_

---

**Editing** see Text processing

**Education**
Brown University to expand software engineering program (Soft News). _S-M Nov 87 94_
education board urges joint programs (Soft News. _S-M Sep 87 90_
federa research awards to remain level (Soft News). _S-M Mar 87 93_
software engineering programs to avoid Wang Institute’s mistakes (Soft News). _Grunan, Galen, S-M Sep 87 88, 90†_

**Educational technology**

**Environments** see Operating systems, Software development environments

**Expert systems** also see Artificial intelligence
AI’s promises now haunt it (New Product Reviews). _Reisman, Sorel, S-M Jul 87 92_
first-class expert system builder. _Lewine, Donald A., S-M Mar 87 82_
knowledge-based program debugging systems. _Seviora, Rudolph E., S-M May 87 20–32_

---

**File systems**

---

**Graphics**
Boxes and Arrows, graphical editor with spreadsheet-like expressions (New Product Reviews). _Eckhouse, Richard, Jr., S-M Jan 87 73–74_
C display utilities by Sydtech (New Product Reviews). _Goodall, Randy K., S-M Nov 87 101_
NSF panel recommends funds for visual tools (Soft News). _S-M Sep 87 91_
upgrading to EGA graphics (New Product Reviews). _Eckhouse, Richard, Jr., S-M Mar 87 80_

---

**Human factors**
creating software that people can and will use (Human Factors). _Potosnak, Kathleen, S-M Sep 87 96–87_
where human factors fits in the software design process (Human Factors). _Potosnak, Kathleen, S-M Nov 87 90–92_

---

**Indexing**
Index Aid, software utility for document indexing (New Product Reviews). _Kaplan, Randy M., S-M Jan 87 73_
ZyIndex, context-oriented text searcher (New Product Reviews). _Malpass, Donald, S-M May 87 77–81_

---

**Information systems** see Database systems

---

**Knowledge-based systems** see Expert systems

---

**Languages**
book review; A Taste of Smalltalk (Kaehler, T., and Patterson D.; 1986). _Weller, Scott W., S-M Nov 87 109_
book review; Fourth and Fifth Generation Programming Languages (Chorafas, D. N.; 1986). _Chaud, Donald D., S-M May 87 102_
book review; The C + + Programming Language (Stroustrup, B.; 1986). _Shaw, Myril, S-M Jul 87 101_
object-oriented design as basis for reusability. _Meyer, Bertrand, S-M Mar 87 50–64,†_
portable Common Lisp for Cray machines. _Anderson, J. Wayne, + , S-M Jul 87 74–83_
reusable software realization using Meld declarative language. _Kaiser, Gail E., + , S-M Jul 87 17–24_
system support for program readability in Smalltalk-80 environment. _Goldberg, Adele, S-M Sep 87 62–70_
visual languages; tutorial and survey. _Chang, Shi-Kuo, S-M Jan 87 29–39_

---

**Legal factors** also see Software protection
federal policy on access to government databases partially rescinded (Soft News). _Grunan, Galen, S-M May 87 93–94_

---

**Logic**
book review, The Logical Basis for Programming: Deductive
November 1987
object-oriented design as basis for reusability. Meyer, Bertrand, S-M Jan 87 90-94
object-oriented system architecture for software reuse and redesign.
Fischer, Gerhard, S-M Jul 87 60-72
reusability comes of age (special issue intro.). Tracz, Will, Guest Ed., S-M Jul 87 6-8

RSL (Reusable Software Library), tool for producing reusable software. Burton, Bruce A., +, S-M Jul 87 25-33

Reviews see Book reviews, Software reviews

Search methods
bounded disorder method for fast data searches with keys. Litwin, Witold, +, S-M Mar 87 16-24
Zygmex, cost-effective text-researcher (New Product Reviews). Malpass, Donald, S-M May 87 79-81

Social factors
Turing awardee calls for awareness (Soft News). S-M Jan 87 88

Software debugging see Debugging, Reliability, Software

Software development
tool better exception-handling in block-structured systems. Knudsen, Jorgen Lindskov, S-M May 87 40-49
book review; Programming Pearls (Bentley, J.; 1986). Chakrapani, Pani N., S-M Sep 87 103
book review; Software Engineering, 2nd edn. (Sommerville, I.; 1985). Warn, Denis, S-M Jan 87 96
component reusability assessment by programmers untrained in reuse. Woodfield, Scott N., +, S-M Jul 87 52-59
creating software that people can and will use (Human Factors). Potosnak, Kathleen, S-M Sep 86 86-87
interview with C. Gordon Bell of National Science Foundation on software research directions (Soft News). S-M Jul 87 102-104
object-oriented design as basis for reusability. Meyer, Bertrand, S-M Jul 87 50-54
object-oriented system architecture for software reuse and redesign.
Fischer, Gerhard, S-M Jul 87 60-72
preventing most-probable errors in software design (Software Standards). Poston, Robert M., S-M Nov 87 87-98
process programming: a dangerous approach? (Soft News). Gruman, Galen, S-M May 87 91-93
SRL (Reusable Software Library), tool for producing reusable software. Burton, Bruce A., +, S-M Jul 87 23-33
Software Revision Management System, collection of integrated software utilities for tracking revisions (New Product Reviews). Swanson, Curtis, S-M Jul 87 96
symposium explores computer-aided software engineering (Soft News). Eckhouse, Richard Jr., S-M Jan 87 92
using types (inheritance in object-oriented programming.
Halbert, Daniel C., +, S-M Sep 87 71-79
where human factors fits in the design process (Human Factors). Potosnak, Kathleen, S-M Nov 87 90-92

Software development environments
Allende environment for distributed, object-oriented databases. Linton, Mark A., S-M Nov 87 70-76
building-blocks approach to reusable software development. Lenz, Manfred, +, S-M Jul 87 34-42
experimental prototyping in Smalltalk object-oriented language.
Diederich, Jim, +, S-M May 87 50-64
Garden environment for conceptual programming using wide variety of techniques. Reiss, Steven P., S-M Nov 87 16-27
integrated design and programming environments (special issue). S-M Nov 87 5-76

I-STAR language-independent environment for integrated project support. Dowson, Mark, S-M Nov 87 6-15
parallel software configuration management for networks. Leblang, David B., +, S-M Nov 87 28-33
Portable Common Lisp for Clay machines. Anderson, J. Wayne, +, S-M Jul 87 77-83
quality assurance in future development environments. Cavano, Joseph P., +, S-M Sep 87 26-34
RPDE3, framework for integrating tool fragments. Harrison, William, S-M Jul 86 46-56
simple language and environment for PCs. Pemberton, Steven, S-M Jan 87 56-64
Symbols Genera programming environment. Walker, Janet H., +, S-M Nov 87 36-45
system support for program readability in Smalltalk-80 environment.
Goldberg, Adele, S-M Sep 87 62-70
Tidem development environment for interactive information systems. Blum, Bruce L, S-M Mar 87 25-34

Software economics
life-cycle analysis of Ada project. Basket, Jerry Harvey, S-M Jan 87 40-47.

Software maintenance
book review; Handbook of Software Maintenance’ (Parikh, G.; 1986). Papadcncnc0, Basa, S-M Nov 87 109
large software systems; effect of modularity on system evolution. Kamel, Ragui F., S-M Jun 87 54-58
measuring and maintaining software maintenance. Grady, Robert B., S-M Sep 87 35-45
preventing errors in software project planning with help from standards (Software Standards feature). Poston, Robert M., S-M Jul 86-88

Software management also see Software development management
space station software management approach (Soft News). Wolfsberger, John, S-M Nov 87 95

Software metrics
foundations for measurement discipline (Quality Time). Curtis, Bill, S-M Nov 87 89, 92
industry metrics top-ten list (Quality Time). Boehm, Barry, S-M Sep 88 84-85

Software protection
Canadian firm sued for software piracy (Soft News). S-M Mar 87 93
clone makers’ copyright arguments (Soft News). Gruman, Galen, S-M Mar 87 94
court rules on program display dispute (Soft News). S-M Jul 87 106
extension of software copyright to 'look and feel' (Soft News). Geminiani, Michael, S-M Mar 87-90
federal policy on access to government databases partially rescinded (Soft News). Gruman, Galen, S-M May 87 93-94
Japanese recently amended copyright law's effect of software. Tomijima, Althea Uhlmans, S-M Jan 87 17-21
US to review program-display copyright laws (Soft News). S-M Sep 87 91

Software quality assurance
Clearroom process, software engineering approach to statistical quality control. Mills, Harlan D., +, S-M Sep 87 19-23
history of quality-assurance field (Quality Time). Shen, Vincent, S-M Sep 87 84
overview of software quality assurance (special issue intro.). Basili, Victor R., Guest Ed., +, S-M Sep 87 6–9
PEI testing methodology for quality assurance; integrated set of policies, techniques, metrics, and standards. Poston, Robert M., +, S-M Sep 87 54–61
quality assurance in future development environments. Cavanagh, Joseph P., +, S-M Sep 87 26–34
quality assurance technology in Japan. Kishida, Kouichi, +, S-M Sep 87 11–18
role of maintenance in quality assurance. Collofello, James S., +, S-M Sep 87 46–51
SQA: in pursuit of perfection (special issue). S-M Sep 87 6–61

Software requirements and specifications
preventing most-probable errors in requirements (Software Standards feature). Poston, Robert M., S-M Sep 87 81–83
writing software requirements using IEEE Std 830 (Software standards feature). Poston, Robert M., S-M Mar 87 70–72. †

Software reviews
Alfas Ada World environment for Alfas Ada compiler (Software Reviews). Pearse, Troy, +, S-M Jul 87 90–91
Backtrack, software tool for doing backup (New Product Reviews). Kaplan, Randy M., S-M May 87 78
Boxes and Arrows, graphical editor with spreadsheet-like expressions (New Product Reviews). Eckhouse, Richard, Jr., S-M Jan 87 73–74
C display utilities (New Product Reviews). Goodall, Randy K., S-M Nov 87 101
Clipper, facilities for creating and compiling database management programs based on dBase III (New Product Reviews). Weisman, Gerald, S-M Jan 87 74
Double Helix, database management system for the Macintosh (Software Reviews). Brown, Carol, S-M Aug 87 67–69
first-class expert system builder. Lewine, Donald A., S-M Mar 87 82
FIL Modula-2 compiler (New Product Reviews). Kaplan, Randy M., S-M Jul 87 78
Index Aid, software utility for document indexing (New Product Reviews). Kaplan, Randy M., S-M Jan 87 73
Laservar, memory-resident desktop publishing program (New Product Reviews). Weisman, Gerald, S-M Mar 87 84
Lightspeed Pascal for Macintosh (Software Reviews). Lewis, Ted, S-M Mar 87 74–76
Lotus Manuscript document processor (New Product Reviews). Gruman, Galen, S-M Sep 87 95
low-cost Ada interpreter for IBM PC (New Product Reviews). McAuliffe, Daniel, S-M Mar 87 79
Make utilities for MS-DOS PCs (New Product Reviews). Eckhouse, Richard, Jr., S-M Nov 87 100
Make utility for MS-DOS (New Product Reviews). Tenney, Richard L., S-M Jul 87 92
MathCAD package for editing mathematical expressions (New Product Reviews). Eckhouse, Richard, Jr., S-M Jan 87 70
Mathplan spreadsheet package (New Product Reviews). Ferrenti, Rick, S-M Jul 87 93
Menu Manager, utility for DOS systems (New Product Reviews). Reisman, Sorel, S-M Jan 87 72. †
Microsoft's C compiler gets even better (Software Reviews). Howard III, Harvey L., +, S-M Sep 87 92–93
Mind Mirror game (New Product Reviews). Eckhouse, D. Noah, +, S-M Mar 87 84
Mix C Works, introductory C programming package (New Product Reviews). Goodall, Randy K., S-M Sep 87 94
MS-DOS programs for desktop publishing (Software Reviews). Gruman, Galen, S-M May 87 70–77
Omnigraffle spreadsheet program (New Product Reviews). Reisman, Sorel, S-M Nov 87 100
options for EGA graphics (New Product Reviews). Eckhouse, Richard, Jr., S-M May 87 83
PAC Micro, project management software (New Product Reviews). Kaplan, Randy M., S-M Mar 87 79
PCEDit, programming editor with improvements (New Product Reviews). Gruman, Galen, S-M Jan 87 73
Planning Tools, decision-support software (New Product Reviews). Reisman, Sorel, S-M Jan 87 75
powerful CAD at low price (New Product Reviews). Eckhouse, Richard, Jr., S-M Mar 87 81
Project Workbench, complete business program for managers (New Product Reviews). Parmentier, Jan, S-M Jan 87 81
PSM: Achiever business program (New Product Reviews). Reisman, Sorel, S-M Jan 87 72
Quick Basic 3.0 compiler/debugger (New Product Reviews). Reisman, Sorel, S-M Mar 87 84
R-base System V database management system (New Product Reviews). Reisman, Sorel, S-M May 87 78–79
Resume Management Systems package for resume trunkup (New Product Reviews). Parmentier, Jan, S-M Mar 87 83–84
Software Revision Management System, collection of integrated software utilities for tracking revisions (New Product Reviews). Swanson, Curtis, S-M Jul 87 96
Taskview multitasking environment for PCs (New Product Reviews). Reisman, Sorel, S-M Nov 87 103
Telesoft Ada revision (Software Reviews). Oman, Paul, S-M Jul 87 89–90
turbo charger for power spreadsheet users (New Product Reviews). Lewine, Donald A., S-M Jan 87 71
two file managers for MS-DOS (New Product Reviews). Lewine, Donald A., S-M Mar 87 82–83
two software compilers by Microsoft providing Fortran for microcomputers (Software Reviews). Johnson, Michael P., S-M Nov 87 97–99
ultimate 3-D CAD system (New Product Reviews). Eckhouse, Richard, Jr., S-M May 87 92
upgrading to EGA graphics (New Product Reviews). Eckhouse, Richard, Jr., S-M Mar 87 80
various packages for MS-DOS PCs’ (New Product Reviews). Reisman, Sorel, S-M Nov 87 102
VMS emulator for PC (New Product Reviews). Kaplan, Randy M., S-M Mar 87 82
Watson, hardware/software product that turns IBM PC or compatible into voice messaging system (New Product Reviews). Lewis, David J., S-M Jan 87 74–75
Wines on Disk program (New Product Reviews). Reisman, Sorel, S-M Jul 87 95
ZyIndex, context-oriented text searcher (New Product Reviews). Malpass, Donald, S-M May 87 79–81

Special issues
integrated design and programming environments. S-M Nov 87 75–76
making reuse a reality. S-M Jul 87 6–63
SQA: in pursuit of perfection. S-M Sep 87 6–61

Spreadsheet programs
Mathplan spreadsheet package (New Product Reviews). Ferranti, Rick, S-M Jul 87 93
Omnicache spreadsheet program (New Product Reviews). Reisman, Sorel, S-M Nov 87 100
turbo charger for power spreadsheet users (New Product Reviews). Lewine, Donald A., S-M Jan 87 71

Standards
book review; Guide to the SQL Standard (Date, C.J.; 1987). Gregorio, Albert, S-M Sep 87 101
discussion of software project management draft standard, IEEE P1058 (Software Standards). Poston, Robert M., S-M May 87 67–69
preventing errors in software project planning with help from standards (Software Standards). Poston, Robert M., S-M Jul 87 86–88
preventing most-probable errors in requirements (Software Standards). Poston, Robert M., S-M Sep 87 81–83
preventing most-probable errors in software design (Software Standards). Poston, Robert M., S-M Nov 87 87–88
selecting and using software tools (Software Standards). Poston, Robert M., S-M Jan 87 65–66
software standards status report (Software Standards). S-M Mar 87 61
writing software requirements with IEEE Std 830 (Software Standards). Poston, Robert M., S-M Jan 87 70–721

Strategic Defense Initiative
Congress cuts Reagan's SDI requests by a third; other research budgets grow moderately (Soft News). Gruman, Galen, S-M Jan 87 68–89
suggestion that SDI research is being boycotted (Soft News). 

**Structured programming** see Software design/development

**Supercomputers**
conference studies role of supercomputers (Soft News). Gross, Barry, *S-M Jan 87 92* 

NASA to use supercomputer simulation (Soft News). *S-M Mar 87 92*

---

**Technology transfer**
technology transfer reforms proposed (Soft News). *Grunman, Galen, S-M Mar 87 92*

**Text processing** also see Desktop publishing, Document handling book review; Document Formatting and Typesetting on the Unix System (Gehani, N.; 1986). Hughes, Phil, *S-M Jul 87 110* 

Index Aid, software utility for document indexing (New Product Reviews). Kaplan, Randy M., *S-M Jan 87 73* 

PC Edit, word-processor document-format converter (New Product Reviews). *Grunman, Galen, S-M Jan 87 73*


---

**Author index**

---

**A**

Anderson, J. Wayne, William F. Galway, Robert R. Kessler, Herbert Melenk, and Winfried Neun. Implementing and optimizing Lisp for the Cray; *S-M Jul 87 74–83*

Anderson, Richard. Soft News—Unix/C reusability library; *S-M Jul 87 105*

Aragon, Rhonda Wienk, see Burton, Bruce A., *S-M Jul 87 25–33*

Artsy, Yeshayahu, Hung-Yang Chang, and Raphael Finkel. Interprocess communication in Charlotte; *S-M Jul 87 22–28*

---

**B**

Bailey, Stephen A., see Burton, Bruce A., *S-M Jul 87 25–33*

Balzer, Robert M. Living in the next-generation operating system; *S-M Nov 87 77–85*

Basili, Victor R., and H. Dieter Rombach, Guest Eds. Implementing quantitative SQA: A Practical model (special issue intro.); *S-M Sep 87 6–9*

Comments, and reply, by Willis, R. R., *S-M Nov 87 4*

Baskette, Jerry Harvey. Life cycle analysis of an Ada project; *S-M Jan 87 40–47*

Comments by Boehm, B., *S-M Jul 87 5*

Bass, Leonard J. Role of a historian in a database management system; *S-M Mar 87 35–40*

Bassett, Paul G. Frame-based software engineering; *S-M Jul 87 9–16*

Bell, C. Gordon Soft News—Parallel, distributed processing lead NSF software research directions (interview); *S-M Jul 87 102–104*

Biggerstaff, Ted, and Charles Richter. Reusability framework, assessment, and directions; *S-M Mar 87 41–48*

Blum, Bruce I. The Tedium development environment for information systems; *S-M Mar 87 25–34*

Boehm, Barry. Comments, with reply, on ‘Life cycle analysis of an Ada project’ by J. Baskette; *S-M Jul 87 5* (Original article, Jan 87 40–47)*

Boehm, Barry. Quality Time—Industrial software metrics top 10 list; *S-M Sep 87 84–85*


Brown, Carol. Software Reviews—Slick visual database program for the Mac; *S-M Jul 87 67–69*

Brun, Mark W., see Poston, Robert M., *S-M Sep 87 24–61*

Buck, Jeffrey J., see Collofello, James S., *S-M Sep 87 46–51*

Burton, Bruce A., Rhonda Wient Aragon, Stephen A. Bailey, Kenneth D. Koehler, and Lauren A. Mayes. The reusable software library; *S-M Jul 87 25–33*

Butler, Janet. Soft News—CASE: How real is it?; *S-M Nov 87 94*

---

**C**

Cartwright, Jeff. Review of ‘Programming Productivity’ (Jones, C.; 1986); *S-M Jul 87 108*

Cavano, Joseph P., and Frank S. La Monica. Quality assurance in future development environments; *S-M Sep 87 26–34*

Chakrapani, Paul N. Review of ‘Programming Pearls’ (Bentley, J.; 1986); *S-M Sep 87 103*

Chand, Donald D. Review of ‘Fourth and Fifth Generation Programming Languages’ (Chorafas, D. N.; 1986); *S-M May 87 102*

Chang, Hung-Yang, see Artsy, Yeshayahu, *S-M Jan 87 22–28*

Chang, Shi-Kuo. Visual languages: A tutorial and survey; *S-M Jan 87 29–39*

Chase, Robert P., Jr., see Leblang, David B., *S-M Nov 87 28–35*

Collofello, James S., and Jeffrey B. Buck. Software quality assurance for maintenance; *S-M Sep 87 46–51*

Conn, Richard. Soft News—Ada software repository; *S-M Jul 87 105–106*


Corradi, Antonio. Review of ‘Pulse: An Ada-Based Distributed Operating System’ (Koefoed, D., et al.; 1985); *S-M Jan 87 95*

Curtis, Bill. Quality Time—Foundations for a measurement discipline; *S-M Nov 87 89, 92*

---

**D**

Dawkins, Spencer. Review of ‘Advanced Unix Programming’ (Rochkind, M.; 1985); *S-M Mar 87 98*

Dawkins, Spencer. Review of ‘The INGRES Papers: A Relational Database System’ (Stonebraker, M., Ed.; 1986); *S-M May 87 99–100*

Diederich, Jim, and Jack Milton. Experiment prototyping in Smalltalk; *S-M May 87 50–64*

Doberkat, Ernst-Erich. Review of ‘The Logical Basis for Programming: Deductive Reasoning’ (Manna, Z., and Walther, D., R.); *S-M Mar 87 99*

Dowson, Mark. Integrated project support with ISTAR; *S-M Nov 87 6–15*

Dyer, Michael, see Mills, Harlan D., *S-M Sep 87 19–25*

---

**E**

Eckhouse, D. Noah, and Peter Grekin. New Product Reviews—Entertaining but not altering; *S-M Mar 87 84*

Eckhouse, Richard, Jr. New Product Reviews—Sophisticated scratchpad mathematician; *S-M Sep 87 770*

Eckhouse, Richard, Jr. New Product Reviews—A good thing made even better; *S-M Jul 87 771*

Eckhouse, Richard, Jr. New Product Reviews—More a block-diagramming system; *S-M Jan 87 773–74*

Eckhouse, Richard, Jr. Soft News—Symposium explores CASE; *S-M Jan 87 92*

Eckhouse, Richard, Jr. New Product Reviews—Upgrading to EGA graphics; *S-M Mar 87 80*

Eckhouse, Richard, Jr. New Product Reviews—Powerful CAD at an attractively low price; *S-M Mar 87 81*

Eckhouse, Richard, Jr. New Product Reviews—The ultimate three-dimensional CAD systems; *S-M May 87 82*

Eckhouse, Richard, Jr. New Product Reviews—More EPA options; *S-M May 87 83*

Eckhouse, Richard, Jr. New Product Reviews—Top of the list; *S-M Jul 87 93*

Eckhouse, Richard, Jr. New Product Reviews—Dynamic duo tackles version management; *S-M Nov 87 100–101*

Emley, David W., see Woodfield, Scott N., *S-M Jul 87 52–59*

Etlinger, Henry A. Review of ‘File Structures Using Pascal’ (Miller, N.E.; 1987); *S-M Nov 87 107–108*

---

**F**

Ferranti, Rick. New Product Reviews—Almost perfect spreadsheet; *S-M Jul 87 93*

Finkel, Raphael, see Artsy, Yeshayahu, *S-M Jan 87 22–28*

Fischer, Gerhard. Cognitive view of reuse and redesign; *S-M Jul 87 60–72*

Fitas, Akis, see Gibbs, Simon, *S-M Mar 87 74–15*

Freeman, Peter, see Prieto-Diaz, Ruben, *S-M Jan 87 6–16*

Furgason, Steve, see Pearse, Troy, *S-M Jul 87 90–91*

---

**G**

Galway, William F., see Anderson, J. Wayne, *S-M Jul 87 74–83*

Garage, Anthony, and T. L. Pappas. Reusability issues and Ada; *S-M Jul 87 43–51*

Garlan, David, see Kaiser, Gail E., *S-M Jul 87 17–24*

Gemignani, Michael. Soft News—Does software copyright extend to look and feel?; *S-M Mar 87 90–91*

Gibbs, Simon, Dennis Tschritzis, Akis Fitas, Dimitri Konstantas, and Yiannis Yeorgaroudakis. Muse: A multimedia filling system; *S-M Mar 87 14–15*

Goldberg, Adele. Programmer as reader; *S-M Sep 87 62–70*
Goodall, Randy K. New Product Reviews—A bargain introduction to C; S-M Sep 87/94

Goodall, Randy K. New Product Reviews—Filling the video void in C; S-M Nov 87 101


Gould, Alan E. Review of 'Files and Databases: An Introduction' (Smith, P. D., and Barnes, G. M.; 1987); S-M Jul 87 108–109

Grady, Robert B. Measuring and maintaining software maintenance; S-M Sep 87 35–45

Gregorio, Albert. Review of 'Guide to the SQL Standard' (Date, C. J.; 1987); S-M Sep 87 101

Grekin, Peter. see Eckhouse, D. Noah, S-M Mar 87 84

Gross, Barry. Soft News—Conference studies role of supercomputers; S-M Jan 87 92

Gruman, Galen. New Product Reviews—A programming editor with some pluses; S-M Jan 87 73

Gruman, Galen. Soft News—Congress cuts Reagan’s SDI requests by a third; other research budgets grow moderately; S-M Jan 87 80–89

Gruman, Galen. Soft News—Desktop publishing steals the show at Comdex; S-M Jan 87 90–91

Gruman, Galen. Soft News—Clone makers’ [software copyright] arguments; S-M Mar 87 92

Gruman, Galen. Soft News—Technology transfer reforms proposed; S-M Mar 87 92

Gruman, Galen. Soft News—Star Wars’ research feeling boycott?; S-M Mar 87 94–95

Correction, S-M Jul 87 101; Comments by F. Seitz, S-M Jul 87 5


Gruman, Galen. Soft News—Information policy partially rescinded; S-M May 87 93–94

Gruman, Galen. Soft News—Developers expect DOS to diverge; S-M May 87 794

Gruman, Galen. New Product Reviews—How far can Norton go?; S-M Jul 87 94–95

Gruman, Galen. Soft News—New software engineering programs plan to avoid Wang Institute’s mistakes; S-M Sep 87 88, 90

Correction, S-M Nov 87 95; Update, S-M Nov 87 94

Gruman, Galen. New Product Reviews—Superb technical-document system; S-M Sep 87 95

Gruman, Galen. Review of ‘Desktop Publishing Skills’ (Felici, J. and Nace T.; 1987); S-M Sep 87 103

Gruman, Galen. Soft News—Software engineers face fundamental challenges; S-M Nov 87 93, 96

Gupta, Naresh, see Pearse, Troy, S-M Jul 87 90–91

H

Halbert, Daniel C., and Patrick D. O’Brien. Using types and inheritance in object-oriented programming; S-M Sep 87 71–79

Harrison, William. RPDE: A framework for integrating tool fragments; S-M Nov 87 46–56


Horspool, R. Nigel. An alternative to the Graham – Glanville code-generation method; S-M May 87 33–39

Howard III, Harvey L., and Michael A. Simon. Software Reviews—Microsoft’s venerable C compiler gets even better; S-M Sep 87 92–93

Hughes, Phil. Review of ‘Document Formatting and Typesetting on the Unix System’ (Gehani, N.; 1986); S-M Jul 87 110

I


Isoda, Sadahiro, Takao Shimomura, and Yuiji Ono. VIPS: A visual debugger; S-M May 87 8–9

J


Johnson, Michael P. Software Reviews—Serious Fortran for micros; S-M Nov 87 97–99

K

Kaiser, Gail E., and David Garlan. Melding software systems from reusable building blocks; S-M Jul 87 17–24


Kamel, Ragui F. Effect of modularity on system evolution; S-M Jan 87 48–54

Kaplan, Randy M. New Product Reviews—A decent aid to document indexing; S-M Jan 87 73

Kaplan, Randy M. New Product Reviews—Project management made easy; S-M Mar 87 79

Kaplan, Randy M. New Product Reviews—VMS emulator for the PC; S-M Mar 87 92

Kaplan, Randy M. New Product Reviews—No more excuses not to back up files; S-M May 87 78

Kaplan, Randy M. New Product Reviews—Easy-to-use Modula-2 compiler; S-M Jul 87 96

Kaplan, Simon E., see Kaiser, Gail E.; S-M Nov 87 58–67

Kessler, Robert R., see Anderson, J. Wayne, S-M Jul 87 74–83

Killian, Denice. Software Reviews—Technical document publishing; S-M May 87 76

Kishida, Kouichi, Masanori Teramoto, Koji Torii, and Yoshihori Urano. Quality-assurance technology in Japan; S-M Sep 87 11–18

Knirk, Dwayne. Software Standards—Prototype outline (included in ‘Requirements writing know-how’); S-M Mar 87 71

Knudsen, Jørgen Lindskov. Better exception-handling in block-structured systems; S-M May 87 40–49

Koehler, Kenneth D., see Burton, Bruce A., S-M Jul 87 25–33

Konstantas, Dimitri, see Gibbs, Simon, S-M Mar 87 4–15

L

LaMonica, Frank S., see Cavano, Joseph P., S-M Sep 87 26–54

Leblang, David B., and Robert P. Chase, Jr. Parallel software configuration management in a network environment; S-M Nov 87 28–35

Lenz, Manfred, Hans Albrecht Schmid, and Peter F. Wolf. Software reuse through building blocks; S-M Jul 87 34–42

Lewine, Donald A. New Product Reviews—A programming language for building expert systems; S-M Jan 87 71–72

Lewine, Donald A. New Product Reviews—A turbo charger for power spreadsheet users; S-M Jan 87 71

Lewine, Donald A. New Product Reviews—Two file managers for MS-DOS; S-M Mar 87 82–83

Lewine, Donald A. New Product Reviews—First-class expert system builder; S-M Mar 87 82

Lewis, David J. New Product Reviews—Make your PC a programmable answering machine; S-M Jan 87 74–75

Lewis, Ted. Software Reviews—Pascal at the edge; S-M Mar 87 74–76

Linger, Richard C., see Mills, Harlan D., S-M Sep 87 19–25

Linton, Mark A. Distributed management of a software database; S-M Nov 87 70–76

Litwin, Witold, and David B. Lomet. A new method for fast data searches with keys; S-M Mar 87 16–24

Lomet, David B., see Litwin, Witold, S-M Mar 87 16–24

M


Mackaman, Mark. Soft News—OS/2 to open new capabilities for PC developers, users ( Interview); S-M Sep 87 89

Malpass, Donald. New Product Reviews—Fast context-oriented text searches; S-M May 87 79–81

Mayes, Laurens A., see Burton, Bruce A., S-M Jul 87 25–33

McAllistle, Daniel. New Product Reviews—Low-cost Ada interpreter for the IBM PC; S-M Mar 87 77

McMahon, Mike, see Walker, Janet H., S-M Nov 87 36–45

Melenk, Herbert, see Anderson, J. Wayne, S-M Jul 87 74–83

Meyer, Bertrand. Reusability: The case for object-oriented design; S-M May 87 50–64

Comments, with reply, by Sander, B., and Botting, R. S-M May 87 73

Micallef, Josephine, see Kaiser, Gail E., S-M Nov 87 58–67

Mill, All. Review of ‘Systematic Software Development Using VDM’ (Gehani, N.; 1987); S-M Mar 87 102

Mills, Harlan D., Michael Dyer, and Richard C. Linger. Cleanroom software engineering; S-M Sep 87 19–25

Milton, Jack, see Diedrich, Jim, S-M May 87 90–94

Moon, David A., see Walker, Janet H., S-M Nov 87 36–45

November 1987
Neun, Winfried, see Anderson, J. Wayne, S-M Jul 8774–83
Nyström, Dennis C. Review of 'Managing for Innovation: Leading Technical People' (Humphrey, W. S.; 1987); S-M May 87 100–101

O’Brien, Patrick D., see Halbert, Daniel C., S-M Sep 8771–79
Oman, Paul. Software Reviews—Telesoft Ada revisited; S-M Jul 87 89–90
Ono, Yuji, see Isoda, Sadahiro, S-M May 87 8–19

Papanicolaou, Basil. Review of 'Handbook of Software Maintenance' (Parikh, G.; 1986); S-M Jul 87 109
Pappas, T. L., see Gargarou, Anthony, S-M Jul 8743–51
Parmentier, Jan. New Product Reviews—Automated resume tracking; S-M Mar 87 83–84
Parmentier, Jan. New Product Reviews—Complete business program for managers; S-M Mar 87 83
Pears, Troy, Steve Furgason, Youfeng Wu, and Naresh Gupta. Software Reviews—Wonderful world of Alysia Ada; S-M Jul 87 90–91
Pemberton, Steven. An alternative simple language and environment for PC's; S-M Jan 87 56–64
Poston, Robert M. Software Standards—Getting the most out of new tools; S-M Jan 87 65–66
Poston, Robert M. Software Standards—Requirements writing know-how; S-M Mar 87 70–72. Includes 'Prototype outline' by D. Knirk
Poston, Robert M. Software Standards—Help for the project manager; S-M May 87 67–69
Poston, Robert M. Software Standards—Preventing most-probable errors in planning; S-M Jul 87 86–88
Poston, Robert M., and Mark W. Bruen. Counting down to zero software failures; S-M Sep 87 54–61
Poston, Robert M. Software Standards—Preventing most-probable errors in requirements; S-M Sep 87 81–83
Poston, Robert M. Software Standards—Most-probable design; S-M Nov 87 87–88
Potonsak, Kathleen. Human Factors—Creating software that people can and will use; S-M Sep 87 86–87
Potonsak, Kathleen. Human Factors—Where human factors fits in the design process; S-M Nov 87 90–92
Prieto-Diaz, Ruben, and Peter Freeman. Classifying software for reusability; S-M Jan 87 6–16

Reisman, Sorel. New Product Reviews—'If only I could get it to work'; S-M Jan 87 72
Comments by R. H. Muller, S-M Mar 87 103
Reisman, Sorel. New Product Reviews—Tools designed to aid decision-making; S-M Jan 87 75
Reisman, Sorel. Review of 'Learning with Personal Computers' (Bork, A.; 1987); S-M Mar 87 100–101
Reisman, Sorel. New Product Reviews—Addictively powerful database system; S-M May 87 78–79
Reisman, Sorel. New Product Reviews—Al's promises now haunt it; S-M Jul 87 92
Reisman, Sorel. New Product Reviews—Sour grapes; S-M Jul 87 95
Reisman, Sorel. New Product Reviews—Function-rich, real-time transaction processor; S-M Sep 87 95
Reisman, Sorel. New Product Reviews—Powerful mainframe spreadsheet has micro flavor; S-M Nov 87 100
Reisman, Sorel. New Product Reviews—Microsoft keeps basic very much alive; S-M Nov 87 103
Reisman, Sorel. New Product Reviews—Hot-key-driven PC multitasking system; S-M Nov 87 103
Reiss, Steven P. Working in the Garden environment for conceptual programming; S-M Nov 87 16–27
Richter, Charles, see Biggerstaff, Ted, S-M Mar 87 41–48
Rombach, H. Dieter, see Basili, Victor R., Guest Eds., S-M Sep 87 6–9

Schallan, Joe. Soft News—Jobs: Unix must grow or die; S-M Jul 87 101, 106
Schmid, Hans Albrecht, see Lenz, Manfred, S-M Jul 87 34–42
Scott, Del T., see Woodfield, Scott N., S-M Jul 87 52–59
Seitz, Frederick. Comments on Soft News—'Star Wars' research fealcy boyfriend?' by G. Gruman; S-M Jul 87 5 (Original report, Mar 87 94–95)
Seyfira, Raphael E. Knowledge-based program debugging systems; S-M May 87 20–32
Shaw, Myril Clement, and Susan Solita Shaw. Review of 'The C+ + Programming Language' (Stroustrup, B.; 1986); S-M Jul 87 110
Comments by Shapiro, J. E., S-M Sep 7 5
Shaw, Susan Solita, see Shaw, Myril Clement, S-M Jul 87 110
Shees, Vincent. Quality Time—A little quality time; S-M Sep 87 84
Shimomura, Tako, see Isoda, Sadahiro, S-M May 87 18–19
Shopiro, Jonathon E. Comments on review of 'The C++ Programming Language' (Stroustrup, B.; 1986) by M.C. Shaw and S.S. Shaw; S-M Sep 87 5 (Original review, S-M Jul 87 110)
Shriver, Bruce D. Reuse revisited (introduction to 'Classifying software for reusability') by R. Prieto-Diaz and P. Freeman; S-M Jan 87 75
Shriver, Bruce D. Integrated environments (introduction to special issue on integrated environments); S-M Nov 87 5
Simon, Michael A. see Howard III, Harvey L., S-M Sep 87 92–93
Stafford, Gary J., see Maciaszek, Lezak A., S-M May 87 101–102
Stratton, William J. Review of 'Managing Software Development: Solving the Productivity Puzzle' (Wiley Learning Technologies; 1985); S-M Mar 87 100
Swanson, Curtis. New Product Reviews—At last, a software revision manager; S-M Jul 87 96

Tenney, Richard L. New Product Reviews—Uneven make for MS-DOS; S-M Jul 87 92
Teramoto, Masanori, see Kishida, Kouichi, S-M Sep 87 11–18
Thompson, Ken. Soft News—Parallel processing's future dim, Unix's bright (introduction); S-M May 87 92–93
Tomiljima, Althea Ulhman. How Japan's recently amended copyright law affects software; S-M Jan 87 17–21
Torigi, Koji, see Kishida, Kouichi, S-M Sep 87 11–18
Tracz, Will, Guest Ed. Reusability comes of age (Special issue intro.); S-M Jul 87 6–8
Tsichritsis, Dennis, see Gibbs, Simon, S-M Mar 87 4–15

Urano, Yoshiyori, see Kishida, Kouichi, S-M Sep 87 11–18

Walker, Janet H., David A. Moon, Daniel L. Weinreb, and Mike McMahan. The Symbols Genera programming environment; S-M Nov 87 36–45
Warne, Denis. Review of 'Software Engineering, 2nd ed.' (Sommerville, I.; 1985); S-M Jan 87 96
Weinreb, Daniel L., see Walker, Janet H., S-M Nov 87 36–45
Weisman, Gerald. New Product Reviews—A faster way to manage your databases; S-M Jan 87 75
Weisman, Gerald. New Product Reviews—Making your laser printer easier to use; S-M Nov 87 84
Weller, Scott W. Review of 'A Taste for Smalltalk' (Kachler, T. and Patterson, D.; 1986); S-M Nov 87 109
Willis, R.R. Comments on special issue on software quality assurance; S-M Nov 87 4 (Original articles, S-M Sep 87 6–61)
Wolf, Peter F., see Lenz, Manfred, S-M Jul 87 34–42
Wolf, Walter A. Review of 'A Prolog Primer' (Rogers, J. B.; 1986); S-M Nov 87 107
Wolfsberger, John. Soft News—Space station hands NASA its biggest software task yet; S-M Nov 87 95
Woodfield, Scott N., and David W. Embley, and Del T. Scott. Can programmers reuse software; S-M Jul 87 52–59
Wu, Youfeng, see Pears, Troy, S-M Jul 87 90–91

Yap, Ken. Review of 'Implementation of the Icon Programming Language' (Grisswold, R. E., and Grisswold, M. T.; 1986); S-M Nov 87 108
Yeorgaroudakis, Yiannis, see Gibbs, Simon, S-M Mar 87 4–15