

Bibliography

- [1] Beck, K.: Extreme Programming Explained - Embrace Change. Addison-Wesley, 2000
- [2] Brown et. al. Professional JSP, 2nd edition. Wrox Press, April 2001
- [3] Luca Cardelli. Type systems. In: Handbook of Computer Science and Engineering. CRC Press, 1997
- [4] Davis, M.: Struts, an open-source MVC implementation. IBM developerWorks, February 2001
- [5] James Duncan Davidson, Danny Coward. Java Servlet Specification, v2.2. Sun Press, 1999
- [6] Gamma et al. Design Patterns. Addison Wesley, 1995
- [7] Nicholas Kassem and the Enterprise Team. Designing Enterprise Applications with the Java 2 Platform, Enterprise Edition. Sun Microsystems, 2000
- [8] Chuck McManis. Looking for lex and yacc for Java? You don't know Jack. JavaWorld, December 1996
- [9] Bertrand Meyer. Applying "design by contract". IEEE Computer, 25(10):40-51, October 1992
- [10] Tam Nguyen, V. Srinivasan. Accessing Relational Databases from the World Wide Web. Proceedings of the 1996 ACM SIGMOD, 1996
- [11] Eduardo Pelegri-Llopart, Larry Cable. Java Server Pages Specification, v.1.1. Sun Press, 1999
- [12] James Rumbaugh, Ivar Jacobson, Grady Booch. The Unified Modeling Language - Reference Manual. Addison-Wesley, 1999
- [13] Enno Scholz, Rainer Lischetzki. Hype - A Java Tool for the Rapid Development of Hyperdocument Management Applications for the WWW, Proc. of JIT, 1999

- [14] John Vlissides. The Hollywood Principle. C++ Report, vol. 8, Feb. 1996
- [15] William M. Waite, Gerhard Goos. Compiler Construction. Springer-Verlag, 1984
- [16] Allen, R.J.; Garlan, D.; and James Ivers. Formal Modeling and Analysis of the HLA Component Integration Standard. In Proceedings of the Sixth International Symposium on the Foundations of Software Engineering, November 1998
- [17] Barracuda. <http://barracuda.enhydra.org/>.
- [18] Cocoon. <http://xml.apache.org/cocoon/>.
- [19] HTML 4.01 Specification. W3C, 1999.
- [20] Mordani, R.; Davidson, J.D.; and Boag, S. Java API for XML Processing Specification, v1.1. Sun Microsystems, 2001.
- [21] Nielsen, J. User interface directions for the Web. In Communications of the ACM 42(1):65-72, January 1999.
- [22] Neerincx, M.A.; Lindenberg, J.; and Pemberton, S. Support concepts for Web navigation: a cognitive engineering approach. In Proceedings of the Tenth International World Wide Web Conference, May 2001.
- [23] Rosenfeld, L.; and Morville, P. Information Architecture for the World Wide Web. O'Reilly, 1998.
- [24] Schaps, G.L. Compiler Construction with ANTLR and Java. In Dr. Dobb's Journal, March 1999.
- [25] Shaw, M.; and Garlan, D. Software Architecture - Perspectives on an emerging Discipline. Prentice-Hall, 1996.
- [26] Shannon, B. et al. Java 2 Platform, Enterprise Edition: Platform and Component Specifications. Addison-Wesley, 2000.
- [27] SOAP. <http://www.w3.org/TR/SOAP/>.
- [28] Szyperski, C. Component Software - Beyond Object-Oriented Programming. Addison-Wesley and ACM Press, 1998.
- [29] Webmacro. <http://www.webmacro.org/>, 2002.
- [30] Whitehead, E.J. et al. Software Architectures: Foundation of a Software Component Marketplace. In Proceedings of the First International Workshop on Architectures for Software Systems, April 1995.
- [31] White, S. et al. JDBC API Tutorial and Reference. Addison-Wesley, 1999.

- [32] Warmer, J.; and Kleppe, A.G. The Object Constraint Language. Addison-Wesley, 1999.
- [33] Web Services Description Language (WSDL) 1.1. <http://www.w3.org/TR/wsdl>.
- [34] XForms 1.0. <http://www.w3.org/TR/xforms/>.
- [35] The Extensible Stylesheet Language (XSL), <http://www.w3.org/Style/XSL/>. Addison-Wesley, 2000
- [36] Draheim, D., Weber, G.: Specification and Generation of JSP Dialogues with Gently. In: Proceedings of NetObjectDays 2001, tranSIT, ISBN 3-00-008419-3, September 2001.
- [37] Draheim, D., Weber, G.: Strong Complex Typed Dialogue-Oriented Server Pages. Technical Report B-02-05. Institute of Computer Science, Free University Berlin, March 2002.
- [38] Draheim, D., Weber, G.: An Introduction to Form Storyboarding. Technical Report B-02-06. Institute of Computer Science, Free University Berlin, March 2002.
- [39] Draheim, D., Weber, G.: An Overview of state-of-the-art Architectures for Active Web Sites. Technical Report B-02-07. Institute of Computer Science, Free University Berlin, March 2002.
- [40] Draheim, D., Weber, G.: Form Charts and Dialogue Constraints. Technical Report B-02-08. Institute of Computer Science, Free University Berlin, March 2002.
- [41] Draheim, D., Weber, G.: An Introduction to State History Diagrams. Technical Report B-02-09, Institute of Computer Science, Free University Berlin, March 2002.
- [42] Draheim, D., Weber, G.: Strongly Typed Server Pages. In: Proceedings of The Fifth Workshop on Next Generation Information Technologies and Systems, LNCS2382. Springer-Verlag, 2002.
- [43] Dirk Draheim, Christof Lutteroth, and Gerald Weber: An Analytical Comparison of Generative Programming Technologies. In: Proceedings of the 19. Workshop GI Working Group 2.1.4. Technical Report at Christian-Albrechts-University of Kiel, to appear.
- [44] Draheim, D., Typed Server Pages, Dissertation, October 2002.
- [45] Mark Green. A Survey of Three Dialogue Models. ACM Transactions on Graphics, vol. 5, no. 3, ACM, 1987, pp. 244-275.

- [46] D.Harel, "Statecharts: a Visual Formalism for Complex Systems", Science of Computer Programming, Elsevier Science Publishers B.V., 1987, pp. 231-274.
- [47] P.J. Hayes, "Executable Interface Definitions Using Form-Based Interface Abstractions", Advances in Human-Computer Interaction, vol. 1, Ablex Publishing Corporation, New Jersey, 1985, pp.161-189.
- [48] IEEE Std 830-1993, Recommended Practice for Software Requirements Specifications, Software Engineering Standards Committee of the IEEE Computer Society, New York, 1993.
- [49] R.J.K Jacob, "Using Formal Specifications in the Design of a Human-Computer Interface", Communications of the ACM, vol.26, no. 4, ACM, 1983, pp.259-264.
- [50] I. Jacobson, "Object-Oriented Software Engineering: A Use Case Driven Approach", Addison-Wesley, 1992.
- [51] I. Jacobson, G. Booch, J. Rumbaugh, "The Unified Software Development Process", Addison-Wesley, 1999.
- [52] P. Pinheiro da Silva, "User Interface Declarative Models and Development Environments: A Survey", Proceedings of 7th International Workshop on Design, Specification and Verification of Interactive Systems, LNCS Vol.1946, Springer-Verlag, Limerick, Ireland, June 2000, pp. 207-226.
- [53] A.I. Wasserman, "A Specification Method for Interactive Information Systems", Proceedings SRS - Specification of Reliable Software, IEEE Catalog No. 79 CHI1401-9C, IEEE, 1979, pp. 68-79.
- [54] A.I. Wasserman, "Extending State Transition Diagrams for the Specification of Human-Computer Interaction", IEEE Transaction on Software Engineering, vol. SE-11, no. 8, IEEE, 1985, pp. 699-713.
- [55] Axel van Lamsweerde, Requirements engineering in the year 00: a research perspective. , Proceedings of the 22nd International Conference on Software Engineering, June 4-11, 2000, Limerick Ireland. ACM, pp. 5-19.
- [56] David Harel, Eran Gery, Executable Object Modeling with Statecharts. Proceedings of the 18th International Conference on Software Engineering, IEEE Computer 30(7): 31-42 (1997)
- [57] Alan M. Davis, Operational Prototyping: A New Development Approach, IEEE Software, Vol. 9, No. 5, September/October 1992, pp. 70-78.
- [58] Günter E. Pfaff, User Interface Management Systems, Springer, Berlin, 1985.

- [59] L. Augustsson, "Cayenne - a language with dependent types", Proceedings of the International Conference on Functional Programming '98, ACM SIG-PLAN Notices, vol. 34, no. 1, Jan. 1999, pp. 239-50.
- [60] C. Brabrand, A. Møller, M. Ricky, M.I. Schwartzbach, "Powerforms: Declarative client-side form field validation", World Wide Web Journal, 3(4), 2000.
- [61] N.G. de Bruijn. "The mathematical language AUTOMATH, its usage and some of its extensions". In Symposium on automatic demonstration, Lecture Notes in Mathematics 125, Springer, 1970, pp. 29-61.
- [62] M. Gogolla, M. Richters, "On Constraints and Queries in UML", The Unified Modeling Language - Technical Aspects and Applications, Physica-Verlag, Heidelberg, 1998, pages 109-121.
- [63] T. DeMarco, "Structured Analysis and System Specification", Prentice-Hall, 1979
- [64] M.Richters, M.Gogolla, "On Formalizing the UML Object Constraint Language OCL", Proc. 17th Conf. Conceptual Modeling (ER98), Springer LNCS, 1998
- [65] P. Vilain, D. Schwabe, C.S. de Souza, "Modeling Interactions and Navigation in Web Applications", Proceedings of 7th International Workshop on Design, Specification and Verification of Interactive Systems, LNCS Vol.1921, Springer-Verlag, Salt Lake City, Utah, October 2000, pp. 115-127.
- [66] E.Yourdon, "Modern Structured Analysis", Yourdon Press, Prentice-Hall, 1989
- [67] G. Engels, M. Gogolla, U. Hohenstein, K. Hulsmann, P. Lohr-Richter, G. Saake, H-D. Ehrich, "Conceptual modeling of database applications using an extended ER model" Data & Knowledge Engineering, 9(4):157-204, 1992.
- [68] OBJECT MANAGEMENT GROUP, "The common object request broker: Architecture and specification", Tech. Rep. Version 2.0, Object Management Group, July 1995.
- [69] David Atkins, Thomas Ball, Glenn Bruns, and Kenneth Cox. Mawl: a domain-specific language for form-based services. In IEEE Transactions on Software Engineering, June 1999.
- [70] Claus Brabrand, Anders Møller, Anders Sandholm, and Michael I. Schwartzbach. A runtime system for interactive Web services. Computer Networks, 31:1391-1401, 1999. Also in Proceedings of the Eighth International World Wide Web Conference.

- [71] Krasner, G.E., Pope, S.T. A Cookbook for Using the Model-View-Controller User Interface Paradigm in Smalltalk-80. In: Journal of Object-Oriented Programming, August/September 1988 26-49
- [72] J. Conallen, "Modeling Web Application Architectures with UML", Communications of the ACM 42(10), 1999, pp.63-70.
- [73] Object Management Group, "OMG Unified Modeling Language Specification", version 1.4, September 2001.
- [74] Martin Fowler, "Analysis Patterns: Reusable Object Models", Addison-Wesley, 1997
- [75] G. Rossi, D. Schwabe, F. Lyardet: "Improving Web Information Systems with Navigational Patterns", Proceedings of the 8th . International Conference on the World Wide Web, Elsevier 1999, pp 589-600.
- [76] Vilain, P.; Schwabe, D.; Souza, C.S., "A Diagrammatic Tool for Representing User Interaction in UML", Lecture Notes in Computer Science 1939, Proc. UML'2000, York, 2000
- [77] Martin Abadi, Luca Cardelli. A Theory Of Objects. Springer, 1996
- [78] Helmut Balzert. Lehrbuch der Software-Technik, Band 1,2. Spektrum Akademischer Verlag, 1996
- [79] Helmut Balzert. From OOA ot GUIs: The JANUS system. In: Journal of Object-Oriented Programming, pp. 43-47, Febr. 1996
- [80] Philip A. Bernstein, Eric Newcomer. Principles of Transaction Processing - For the Systems Professional. Morgan Kaufmann, 1997
- [81] Grady Booch, James Rumbaugh, Ivar Jacobson. The Unified Modelling Language User Guide. Addison-Wesley, 1999
- [82] Frederick P. Brooks. The mythical man-month - Essays on Software Engineering. Addison-Wesley Publishing Company, 1975
- [83] Peter Coad, Edward Yourdon. Object-Oriented Analysis. Prentice Hall, 1990
- [84] Peter Coad. Object-Oriented Patterns. Comm. ACM, Vol.35, No.9, September 1992
- [85] Grady Booch. Object-Oriented Analysis and Design, Benjamin/Cummings, Redwood City, 1994
- [86] Martin Fowler. UML-Distilled : Applying the Standard Object Modelling Language. Addison-Wesley, 1997
- [87] Mark Grand. Patterns in Java, vol 1. John Wiley and Sons, 1998

- [88] Heberfellner, Nagel, Becker, Büchel, v.Massow. Systems Engineering - Methodik und Praxis. Verlag Industrielle Organisation Zürich, 1999
- [89] Peter M. Heinckens. Building Scalable Database Applications. Addison Wesley, 1998
- [90] International Standard ISO 9001. Quality systems - Model for quality assurance in design, development, production, installation and servicing. ISO,1994
- [91] International Standard ISO 9000-3. Quality management and quality assurance standards - Part 3 : Guidelines for the application of ISO 9001 to the development. supply and maintenance of software ISO, 1991
- [92] International Standard ISO 9241-10. Ergonomic requirements for office work with visual display terminals (VDTs) - Part 10 : Dialogue Principles. ISO, 1991
- [93] Philippe Kruchten. The Rational Unified Process. Addison-Wesley, 1999
- [94] Craig Larman. Applying UML and Patterns. Prentice Hall, 1998
- [95] Barbara Liskov, John Guttag. Program Development in Java - Abstraction, Specification and Object-Oriented Design. Addison-Wesley, 2000
- [96] Thomas J. Mowbray, Raphael C. Malveau. CORBA-Design Patterns. John Wiley and Sons Inc., 1997
- [97] Terry Quatrani. Visual Modeling with Rational Rose and UML. Addison Wesley, 1998
- [98] A.-W. Scheer. ARIS - Vom Geschäftsprozeß zum Anwendungssystem. Springer-Verlag, 1994
- [99] A.-W. Scheer. ARIS - Modellierungsmethoden Metamodelle, Anwendungen. Springer-Verlag, 1994
- [100] Paul Schönsleben. Integrales Logistikmanagement - Planung und Steuerung von umfassenden Geschäftsprozessen. Springer-Verlag, 1998
- [101] Paul Schönsleben. Praktische Betriebsinformatik - Konzepte logistischer Abläufe. Springer-Verlag, 1994
- [102] Oliver Sims. Business Objects - Delivering cooperative objects for client-server. The IBM McGraw-Hill Series. McGraw-Hill Book Company, 1994
- [103] Michael J. Muller, Retrospective on a year of participatory design using the PICTIVE technique, CHI '92, Human factors in computing systems, Conference proceedings, May 3-7, 1992, Monterey, CA, USA. ACM, 1992, pp. 455-462

- [104] Muller, M. J., Wildman, D. M., White, E. A. (1993). Equal opportunity PD using PICTIVE. *Communications of the ACM*, 36(4), pp. 64-66
- [105] Bertrand Meyer. *Eiffel, the Language*, Prentice Hall, 1992
- [106] Desmond D'Souza, Aamond Sane, Alan Birchenough. First Class Extensibility for UML - Packaging of Profiles, Stereotypes, Patterns. *Lecture Notes in Computer Science 1723, Proc. UML'99, Fort Collins, 2000*
- [107] P. Pinheiro da Silva, Norman W. Paton. UMLi: The Unified Modeling Language for Interactive Applications. *Lecture Notes in Computer Science 1939, Proc. UML'2000, York, 2000*
- [108] J. F. e Cunha, N. J. Nunes. Towards a UML Profile for Interaction Design: The Wisdom Approach. *Lecture Notes in Computer Science 1939, Proc. UML'2000, York, 2000*
- [109] Colin Atkinson, Thomas Kühne. Strict Profiles: Why and How", *Lecture Notes in Computer Science 1939, Proc. UML'2000, York, 2000*
- [110] Gregor Engels, Jan Hendrik Hausmann, Reiko Heckel, Stefan Sauer. Dynamic Meta Modeling: A Graphical Approach to the Operational Semantics of Behavioral Diagrams in UML. *Lecture Notes in Computer Science 1939, Proc. UML'2000, York, 2000*
- [111] Colin Atkinson, Thomas Kühne. The Essence of Multilevel Metamodeling. *Lecture Notes in Computer Science 2185, Proc. UML'2001, Toronto, 2001*
- [112] Dori D., Goodman M. From Object-Process analysis to Object- Process design. *Annals of Software Engineering 2 pp. 25-50, 1996*
- [113] Dori D. Object-Process Methodology applied to modeling credit card transactions. *Journal of Database Management, Vol. 12, No 1, pp. 4-14, 2001*
- [114] Rumbaugh J., Balaha M., Premerlani W., Eddy F., and Lorenson W. *Object-Oriented modeling and design*. Englewood cliffs, N.J.: Prentice-Hall, 1991
- [115] Shoval P. ADISSA: architectural design of information systems based on Structured Analysis. *Information System, Vol. 13 (2), pp. 193-210, 1988*
- [116] Shoval P. and Frumermann I. OO and EER conceptual schemas: a comparison of user comprehension. *Journal of Database Management, Vol. 5, No. 4 pp. 28-38, 1994*
- [117] Shoval P. and Kabeli J. FOOM: functional- and object-oriented analysis and design of information systems - an integrated methodology. *Journal of Database Management, Vol. 12, No.1, pp. 15-25, 2001*

- [118] W.Damm and D.Harel. LSCs : Breathing life to Message Sequence Charts, Tech. Rep CS98-09, The Weizmann Institute of Science, Dept of Applied Maths and Comp. Sc., April 1998.
- [119] W.Damm and D.Harel. LSCs: Breathing life into message sequence charts. Formal Methods in System Design, 19, pp. 45-80, 2001
- [120] D. Goldin, S. Srinivasa and B. Thalheim, IS = DBS + interaction, Towards principles of information systems. Proc. ER'2000 (Eds. D. Embley, A. Laender, V. Storey), LNCS, Springer, 2000.
- [121] A. Düsterhöft, B. Thalheim, SiteLang: Conceptual Modeling of Internet Sites LNCS 2224, Springer, 2001, p. 179 ff.
- [122] J. Lewerenz, Human-computer interaction in heterogeneous and dynamic environments: A framework for its conceptual modeling and automatic customization. PhD, BTU Cottbus, Cottbus, 2000.
- [123] T. Clark, A. Evans, and S. Kent, Engineering Modelling Languages: A Precise Meta-Modelling Approach, Proc. FASE 2002, LNCS 2306, p. 159 ff, 2002.
- [124] ISO, Information Technology, Z Formal Specification Notation, Syntax, Type System and Semantics, ISO/IEC 13568:2002
- [125] Kamath, Y. H.; Smilan, R. E.; Smith, J. G. Reaping Benefits With Object-Oriented Technology. AT&T Technical Journal 72, 5 (1993): 14-24.
- [126] C. Gane, T. Sarson, Structured Systems Analysis: Tools & Techniques, Improved System Technologies New York, New York, 1977.
- [127] C. Gane, T. Sarson, Structured Systems Analysis: Tools & Techniques, Prentice-Hall, 1979.
- [128] C. Gane, Rapid Systems Development Using Structured Techniques and Relational Technology, Prentice-Hall, 1989.
- [129] Databehandling - Programsprak - SIMULA, Svensk Standard SS 636114, 1987.
- [130] B. Kirkerud, Object-oriented Programming with Simula, Addison-Wesley, Workingham, 1989.
- [131] G. Lamprecht, Einführung in die Programmiersprache SIMULA, Vieweg, Braunschweig, 1976.
- [132] J. Ziegler, ViewNet - Conceptual Design and Modeling of Navigation, Proc. INTERACT 97.
- [133] L. Baresi, F. Garzotto, and P. Paolini, From Web Sites to Web Applications: New Issues for Conceptual Modeling, ER 2000 Workshops, Salt Lake City, LNCS 1921, 2000, p. 89 ff.

- [134] M. Gaedke, G. Graef (2000): Development and Evolution of Web-Applications using the WebComposition Process Model. International Workshop on Web Engineering at the 9th International World-Wide Web Conference (WWW9), Amsterdam, The Netherlands, May 15, 2000.
- [135] T. Isakowitz, E. A. Stohr, and P. Balasubramanian. RMM: A Methodology for Structured Hypermedia Design. *Communications of the ACM*, 38(8): 34-44, August 1995.
- [136] F. Halasz, M. Schwartz. The Dexter hypertext reference model. *Communications of the ACM*, 37(2): 30-39, February 1994
- [137] D. Harel and A. Naamad. The StateMate Semantics of Statecharts. In *ACM transactions on software engineering and methodology*, Vol 5 No 4, 1996, 293-333
- [138] J. Nielsen, The Art of Navigating through Hypertext. *Communications of the ACM*, vol. 33, no. 3 (March 1990), pp. 296-310.
- [139] S. Ceri, P. Fraternali, S. Paraboschi: Web Modeling Language, (WebML): a modeling language for designing Web sites. Proceedings of the 9 th. International World Wide Web Conference, Elsevier, 2000, pp. 137-157.
- [140] Stefano Ceri, Piero Fraternali, Aldo Bongio, Andrea Maurino. Modeling data entry and operations in WebML, WebDB 2000, Dallas, 2000.
- [141] R. Malan, D. Coleman, R. Letsinger, Lessons Learned from the Experiences of Leading-Edge Object Technology Projects in Hewlett-Packard, . OOPSLA'95 ACM SIGPLAN Notices 30(10): 33-46. Austin, TX, October 15-19, 1995. Palo Alto, CA: Hewlett-Packard, 1995. 33-46
- [142] Daniel Ingalls, The Smalltalk-76 Programming System, POPL 1978, Tucson, Arizona, 9-16
- [143] Peter Coad. *Object Models - Strategies, Patterns, and Applications*. Yourdon Press, A Prentice Hall Company, 1995.
- [144] Peter Coad, David North, and Mark Mayfield. *Strategies and Patterns Handbook*. Object International, Inc. 1997. No publisher given. <http://thecoadletter.com/download/objectmodels/objectmodelshandbook22.pdf>
- [145] Winter, Robert. Formal Validation of Schema Clustering for Large Information Systems. Americas Conference on Information Systems, Pittsburgh, PA August 25 - August 27, 1995.
- [146] Winter, Robert. Design and Implementation of Derived Entities, Entity-Relationship Approach - ER'93, Springer LNCS, Vol. 823, Berlin, 1994, S. 61-73

- [147] Winter, Robert. Formalised Conceptual Models as a Foundation of Information Systems Engineering, Entity-Relationship Approach - ER'94, Springer LNCS, Vol. 881, Berlin, 1994, S. 437-455 (94-11)
- [148] D. Tschritzis, Form Management, Communications of the ACM, 25, 7, July 1982, pp. 453-478.
- [149] J.M. Spivey. The Z Notation. Prentice Hall, 1989.
- [150] J.B. Wordsworth. Software Development with Z - A Practical Approach to Formal Methods in Software Engineering. Addison Wesley, 1992.
- [151] Ian Hayes. Specification Case Studies. Prentice Hall, 1993.