

# Rebecca Wirfs-Brock

24003 SW Baker Rd., Sherwood, OR 97140

503-313-4978 (cell)

503-625-9529 (business)

503-625-5903 (home)

rebecca@wirfs-brock.com

## SUMMARY

Rebecca Wirfs-Brock is an internationally recognized leader in the development of object design methodologies. She invented the set of development practices known as Responsibility-Driven Design. Among her widely used innovations are use case conversations and object role stereotypes. She is the regular design columnist for IEEE Software and the author of the classic text, *Designing Object-Oriented Software*. Her most recent book, *Object Design: Roles, Responsibilities and Collaborations*, was published in 2002.

Rebecca has written numerous articles, lectured and presented tutorials on object analysis, design and management topics. Rebecca's methodology contributions are based upon thirty years of hands-on software development experience. Most recently she has advised an engineering group on design and architecture for a large embedded application, been a major contributor to the design and architecture of a telecommunications framework, led the development of an online banking system, and mentored teams on use case writing, design, architecture, and managing incremental and iterative object-technology projects.

## EMPLOYMENT HISTORY

### 1997-present **Wirfs-Brock Associates**

President and founder of a company specializing in the transfer of object expertise and skills to teams and companies. Consulting projects include architecting an Operations Support Systems integration framework for a telco company; advising management, architects and lead designers of telephone switch control software; advising a large financial company on how to support flexibility and variation in their software system; technical oversight of a government application tracking youth offenders in the state of Oregon; architecture tradeoff analysis training and consulting for a state agency; agile feature-level use cases for a cell phone company; and custom training and requirements workshops for several industries. Developed and delivered object analysis, design and design-focused courses to industrial clients.

### 1991-1997 **Instantiations/Digitalk/Parcplace-Digitalk**

Chief Technologist for the professional services organization of a Smalltalk language vendor. Grew organization from 4 to 60 people and through two mergers. Created a set of "best practices", developed strategic application frameworks, and was technical lead for key consulting engagements at Fortune 1000 companies. Developed training curriculum and courses that successfully introduced thousands of students to object design and programming. Maintained a high external profile by writing columns, speaking at numerous conferences and tradeshow, and OOPSLA conference leadership. Advised senior management on strategic issues and business opportunities.

### 1976-1991 **Tektronix**

Principal Engineer, Portable Oscilloscopes Division

Object technologist for a team developing the TDS family of oscilloscopes using embedded Smalltalk.

Principal Engineer, Graphics Workstations Division

Software Architect for a 3-D Visualization Workstation.

Principal Engineer, Tek Labs, Software Productivity Technologies Group

Program Manager Reusable Components. Led the development of the Color Smalltalk product.

Principal Engineer, AI Machines

Software Development Manager for the 440x AI workstation family.

Senior Engineer, Information Display Division.

Software Project Leader for the 410x family of low cost raster graphics terminals.

Senior Engineer, Graphics Computing Systems

Software Project Leader for the 4909 file server.

Software Engineer, Microprocessor Development Products

Designed and implemented a universal linking loader.

Software Evaluation Engineer, Information Display Products

## EDUCATION

B.A., Computer Science and Psychology, University of Oregon (Phi Beta Kappa)  
Graduate work in Computer Science, Oregon State University

## PATENTS AND PUBLICATIONS

### Patent

U.S. Patent #4,635,049 Apparatus for Presenting Image Information for Display Graphically, Warren Dodge and Rebecca Wirfs-Brock

### Books

*Object Design: Roles, Responsibilities, and Collaborations*, Rebecca J Wirfs-Brock and Alan McKean, Addison-Wesley, 2003

“Designing Objects and their Interactions: A Brief Look at Responsibility-Driven Design” chapter in *Scenario-Based Design: Envisioning the Work and Technology in System Development*, John Carroll, Ed., John Wiley & Sons, 1995

*Designing Object-Oriented Software*, Rebecca J Wirfs-Brock, Brian Wilkerson, and Lauren Wiener, Prentice Hall, 1990

### Selected Articles

Rebecca Wirfs-Brock, “Explaining Your Design” in volume 23, number 6 of IEEE Software

Rebecca Wirfs-Brock, “Toward Exception Handling Best Practices and Patterns” in volume 23, number 5 of IEEE Software

Rebecca Wirfs-Brock, “Designing For Recovery” in volume 23, number 5 of IEEE Software

Rebecca Wirfs-Brock, “Refreshing Patterns” in volume 23, number 3 of IEEE Software

Rebecca Wirfs-Brock, “Characterizing Classes” in volume 23, number 2 of IEEE Software

Rebecca Wirfs-Brock, “Looking for Powerful Abstractions” in volume 23, number 1 of IEEE Software

Rebecca Wirfs-Brock, “Adding to Your Conceptual Toolkit: What’s Important About Responsibility-Driven Design” in the Report on Object Analysis and Design, volume 1, number 2

Rebecca Wirfs-Brock, “Designing Scenarios: Making the Case for a Use Case Framework”, The Smalltalk Report, volume 4, number 3

Rebecca Wirfs-Brock, “The Art of Designing Meaningful Conversations”, The Smalltalk Report, volume 4, number 5

Rebecca Wirfs-Brock, “Characterizing Your Objects” in the Smalltalk Report, volume 2, number 5

Rebecca Wirfs-Brock, “Characterizing Your Application’s Control Style” in the Report on Object Analysis and Design, volume 1, number 3

Rebecca Wirfs-Brock, “How Designs Differ” in the Report on Object Analysis and Design, volume 1, number 4

### Refereed Papers and Publications

Rebecca Wirfs-Brock, James Noble and Paul Taylor, “Problem Frame Patterns: An Exploration of Patterns in the Problem Space”, presented at PLoP 2006

Ralph Johnson and Rebecca Wirfs-Brock, “Surveying Current Research in Object-Oriented Design”, p. 104-124, Communications of the ACM, volume 33, issue 9 (1990)

Rebecca Wirfs-Brock, “An Integrated Color Smalltalk-80 System”, p. 71-82, OOPSLA ’88 Conference Proceedings

Rebecca Wirfs-Brock and Brian Wilkerson, “Object-Oriented Design: A Responsibility-Driven Approach”, p. 71-75, OOPSLA ’89 Conference Proceedings

Joaquin Miller and Rebecca Wirfs-Brock, “How Can a Subsystem Be Both a Package and a Classifier?” in the UML 1999 Conference Proceedings

Rebecca Wirfs-Brock, “What it Really Takes to Handle Exceptions in Use Cases” p. 341-370 in forUse 2002 Conference Proceedings

## PROFESSIONAL ACTIVITIES

Invited speaker, panel member, tutorial presenter, and workshop organizer at numerous conferences and users groups. Recent talks include “Skills for the Agile Designer” presented at Agile 2006; “The Art of Telling Your Design Story” presented at OOPSLA 2006 and SD Best Practices 2006; “Introducing Problem Frames” presented at SD Best Practices 2005 and 2006, and Architecture and Design World 2006; “A Brief Tour of Responsibility-Driven Design” presented at OOPSLA 2006, SD Best Practices 2006 and Architecture and Design World 2006

IEEE Software Design Columnist, 2006-

Agile Alliance Board Member, 2003-2006  
Experience Report Chair, Agile 2005; Experience Report Committee Member Agile 2004 and 2006  
Software Development Best Practices Conference Advisor, 2004-  
Experience Report Chair, Agile Development Conference 2003  
Adjunct Professor, Oregon Graduate Institute, 2002-  
Taught CSE 504 Object-oriented analysis and design, Fall 2002  
Member of the UML 2002 and UML 1999 Program Committees  
Conference Chair of OOPSLA 95  
Member of OOPSLA Executive Steering Committee, 1995-1997  
Program Chair of OOPSLA 92  
Practitioner Reports Chair, OOPSLA 2002 and OOPSLA 1993  
Tutorial Presenter at OOPSLA 1990-2006  
Invited speaker at the OOPSLA 2001 Educators' Symposium  
Member of numerous OOPSLA Program, Practitioner, and Tutorial Committees  
Member of OOPSLA 2006 Onward! Track Committee  
Member of the ECOOP 92 Program Committee