

Contributors

Scott W. Ambler is the Practice Leader Agile Development with IBM Software Group and he works with IBM customers around the world to improve their software processes. He is the founder of the Agile Modeling (AM), Agile Data (AD), Agile Unified Process (AUP), and Enterprise Unified Process (EUP) methodologies. Scott is the (co-)author of 19 books, including Refactoring Databases, Agile Modeling, Agile Database Techniques, The Object Primer 3rd Edition, and The Enterprise Unified Process. Scott is a senior contributing editor with Information Week. His personal home page is <http://www.ibm.com/software/rational/leadership/leaders/#scott> and his Agile at Scale blog is www.ibm.com/developerworks/blogs/page/ambler.

Keoki Andrus...



Scott Berkun worked on the Internet Explorer team at Microsoft from 1994–1999 and left the company in 2003 with the goal of writing enough books to fill a shelf. *The Myths of Innovation* is his second book; he also wrote the bestseller, *The Art of Project Management* (O'Reilly). He makes a living writing, teaching, and speaking. He teaches a graduate course in creative thinking at the University of Washington, runs the Sacred Spaces architecture tour at New York City's Gel Conference, and writes about innovation, design, and management at <http://www.scottberkun.com>.

Barry Boehm is the TRW Professor of Software Engineering in the computer science department at USC, as well as the director of USC's Center for Systems and Software Engineering.

Dr. Barry Boehm served within the U.S. Department of Defense (DoD) from 1989 to 1992 as director of the DARPA Information Science and Technology Office and as director of the DDR&E Software and Computer Technology Office. He worked at TRW from 1973 to 1989, culminating as chief scientist of the Defense Systems Group, and at the Rand Corporation from 1959 to 1973, culminating as head of the Information Sciences Department. He entered the software field at General Dynamics in 1955.

His current research interests involve recasting systems and software engineering into a value-based framework, including processes, methods, tools, and an underlying theory and process for value-based systems and software definition, architecting, development, validation, and evolution. His contributions to the field include the Constructive Cost Model (COCOMO) family of systems and software engineering estimation models, the Spiral Model and Incremental Commitment Model of the systems and software engineering process, and the Theory W (win-win) approach to systems and software management and requirements determination. He has received the ACM Distinguished Research Award in Software Engineering and the IEEE Harlan Mills Award, and an honorary ScD in Computer Science from the University of Massachusetts. He is a Fellow of the primary professional societies in computing (ACM), aerospace (AIAA), electronics (IEEE), and systems engineering (INCOSE), and a member of the U.S. National Academy of Engineering.

Grady Booch is recognized internationally for his innovative work in software architecture, software engineering, and collaborative development environments. He has devoted his life's work to improving the art and science of software development. Grady served as chief scientist of Rational Software Corporation since its founding in 1981 and through its acquisition by IBM in 2003. He now is part of the IBM Thomas J. Watson Research Center serving as chief scientist for software engineering, where he continues his work on the *Handbook of Software Architecture* and also leads several projects in software engineering that are beyond the constraints of immediate product horizons.

Grady continues to engage with customers working on real problems and is working to build deep relationships with academia and other research organizations around the world. Grady is one of the original authors of the Unified Modeling Language (UML) and was also one of the original developers of several of Rational's products. Grady has served as architect and architectural mentor for numerous complex software-intensive systems around the world in just about every domain imaginable. He also is the author of six best-selling books, including *The Unified Modeling Language User Guide* and the seminal *Object-Oriented Analysis and Design with Applications*, and writes a regular column on architecture for IEEE Software. Grady lives in Thorne Bridge, Colorado, and Maui. His interests include reading, traveling, singing, playing the Celtic harp, Bikram yoga, and kayaking. At random times, the laws of physics do not apply to him. He is not dead yet.

Mike Cohn is the founder of Mountain Goat Software, a process and project management consultancy and training firm. He is the author of *Agile Estimating and Planning*, *User Stories Applied for Agile Software Development*, and *Succeeding with Agile*. With more than 20 years of experience, Mike has previously been a technology executive in companies of various sizes, from start-up to Fortune 40. A frequent magazine contributor and conference speaker, Mike is a founding member of the Scrum Alliance and the Agile Alliance. He can be reached at mike@mountaingoatsoftware.com.

Dr. Michael Collins is the chief scientist for RedJack, LLC, a network security consulting firm in the Maryland area. In this role, he develops traffic monitoring systems and analytical techniques for very large networks. Prior to working for RedJack, Dr. Collins worked for the CERT/Network Situational Awareness team at Carnegie Mellon University, where he developed tools and technologies for the DoD CENTAUR and DHS EINSTEIN projects. Dr. Collins has a PhD in electrical and computer engineering from Carnegie Mellon University; he regularly publishes and lectures on network security and situational awareness.

Mark Denovich is currently living and working in Europe as a senior business consultant in the Auto ID industry, focusing on voice recognition technology. He is involved in developer training, product development, and R&D. Mark began developing software as a way of financing a Physics degree at Carnegie Mellon University. Sound advice from his advisor "uh, I don't think you are cut out for academia" and a inability to grow a respectable beard led to dropping physics and pursuing software development as a career. In those classes he learned that software development was part art, part science. In the real world he learned it was actually a business. His dream is to one day live on his own Walden Pond with a high-speed Internet connection, of course.

Bill DiPierre started writing software in high school more than 25 years ago. Along the way he has held just about every job that exists within the software development life cycle. Bill lives in Philadelphia with two dogs, both of whom support his career but encourage him to remember that there's more to life than being good at your job.

Cory Doctorow (<http://craphound.com>) is a science fiction novelist, blogger, and technology activist. He is the co-editor of the popular weblog Boing Boing (<http://boingboing.net>), and a contributor to *Wired*, *Popular Science*, *Make*, the *New York Times*, and many other newspapers, magazines, and websites. He was formerly director of European affairs for the Electronic Frontier Foundation (<http://www EFF.org>), a non-profit civil liberties group that defends freedom in technology law, policy, standards, and treaties. In 2007, he served as the Fulbright Chair at the Annenberg Center for Public Diplomacy at the University of Southern California.

Cory has won the Locus and Sunburst awards for his writing, and has been nominated for the Hugo, Nebula, and British Science Fiction awards. He co-founded the open source peer-to-peer software company OpenCola, and presently serves on the boards and advisory boards of the Participatory Culture Foundation, the MetaBrainz Foundation, Technorati, Inc., Stikkit, the Organization for Transformative Works, Areae, the Annenberg Center for the Study of Online Communities, and Onion Networks, Inc. In 2007, *Enter-*

tainment Weekly called him “The William Gibson of his generation.” He was also named one of *Forbes Magazine’s* 2007 Web Celebrities, and one of the World Economic Forum’s Young Global Leaders for 2007. He is presently working on narrative documentary films with Kirby Dick (*This Film Is Not Yet Rated*) and Philippe Parreno (*Zidane*), and on a new young adult novel, *For the Win* (about union organizing in video games).

On February 3, 2008, he became a father. His little girl is named Poesy Emmeline Fibonacci Nautilus Taylor Doctorow, and is a marvel that puts all the works of technology and artifice to shame.

Patricia Ensworth is president of Harborlight Management Services, a consultancy specializing in risk management, global logistics, and multicultural teamwork for software engineering. She is the author of *The Accidental Project Manager: Surviving the Transition from Techie to Manager* (John Wiley & Sons) as well as essays in publications ranging from *CIO* to *Salon* to *Natural History*. After receiving a master’s degree in cultural anthropology from Columbia University, she began working at Merrill Lynch as a software tester. Her subsequent career has included roles as a quality assurance manager, program manager, vendor relationship manager, trainer, and consultant. She has held management positions at Merrill Lynch, Moody’s Corporation, and UBS Investment Bank; her consulting clients have included Citigroup, the American Management Association, Memorial Sloan-Kettering Cancer Center, and the U.S. Navy. She has earned PMP, CSQE, and ISTQB certifications. When not interacting with a device containing a keyboard and a screen, she can often be found sailing in New York Harbor.

Trevor Field is a British businessman with extensive experience in the outdoor advertising industry. He has also worked in the printing and publishing industries both in South Africa and in the UK.

In 1990, Trevor began developing the PlayPump system (<http://www.roundabout.co.za>), an innovative water system that doubles as a water pump and merry-go-round for children. Over the next four years, he designed and built the first two PlayPumps that were installed in Masinga, a rural area of KwaZulu-Natal, a province of South Africa. In 1995, he decided to focus full time on the Roundabout PlayPump system. He joined forces with Paul Ristic in 1996 and in 1997 Roundabout Outdoor was founded. Roundabout Outdoor went on to win the inaugural World Bank Development Marketplace competition in 2000 for the PlayPump. The system has since achieved worldwide successes in other competitions and has attracted donor funding (via the NGO, PlayPumps International) from all quarters; one of the most significant to date was the \$16.4 million donation announced by First Lady Laura Bush at the Clinton Economic Forum in New York in September 2006. Trevor is currently working to expand the PlayPump model into the rest of Africa and the world. Thus far, more than 1,000 PlayPumps have been installed in South Africa, Mozambique, Swaziland, Lesotho, and Zambia, with systems in other countries including Tanzania, Kenya, Uganda, and Ethiopia in development.

Karl Fogel is an open source developer and author. After working on CVS and writing *Open Source Development with CVS* (Coriolis; <http://cvsbook.com>), he went to CollabNet, Inc.,

as a founding developer in the Subversion project. Based on his experiences there, he wrote *Producing Open Source Software: How to Run a Successful Free Software Project* (O'Reilly; <http://producingoss.com>). After a brief stint as an open source specialist at Google, he left to found QuestionCopyright.org. He writes and speaks regularly on copyright reform and on the application of open source principles to areas outside software.

Peter Gluck is a senior software engineer at NASA's Jet Propulsion Laboratory in Pasadena, CA. Peter led the overall software development on the Phoenix Mars Lander project and has been involved with many successful NASA interplanetary missions over the past 20 years. Peter has also contracted with numerous software and technology companies on software development and implementation projects since 2002. He has received group and individual achievement awards from several aerospace organizations such as NASA, AIAA and JPL, and he is a frequent public speaker and published author on software-related topics. Peter has a B.S. in Mathematics from CSU Northridge and an M.S. in Aerospace Engineering from USC.

James Grenning is the founder of Renaissance Software Consulting, where he trains, coaches, and consults worldwide. With more than 30 years of software development experience, both technical and managerial, James brings a wealth of knowledge, skill, and creativity to software development teams and their management. James's mission is to bring improved technical and management practices to development teams. As his professional roots are in embedded software, he is leading the way to introduce Agile development practices to that challenging world. He is currently writing a book on applying test-driven development to embedded software. James was one of the original Extreme Programming coaches and trainers, always working with the best. He invented Planning Poker, an Agile estimating technique used around the world. He also participated in the creation of the Manifesto for Agile Software Development.

Mark Healey is creative director at Media Molecule. He joined the games industry in 1988 and has established himself as one of the industry's most multitalented game developers. His main area of specialization is art, but during his career Mark has coded, designed, and contributed to game audio tracks. Mark joined Bullfrog Productions in 1994 and worked on some of its biggest hits, including Theme Park, Magic Carpet, and Dungeonkeeper. In 1997, he left Bullfrog to join Lionhead Studios where he worked on Black & White and Fable. His small contribution to the cult Internet title Live for Speed gave Mark a taste for development on a smaller scale. In 2002, he began work on his own game, Rag Doll Kung Fu, working on the game's graphics, code, design, and music with help from some friends. Rag Doll Kung Fu's blend of playability and off-the-wall humor proved to be a winning formula and the game was nominated for the Develop Awards Best New PC IP and Innovation categories. The development and subsequent success of Rag Doll King Fu showed Mark that he worked best in a small, intense, but fun environment. Inspired by this, he formed a new development studio, Media Molecule, with the friends who had helped him make Rag Doll Kung Fu such a success: Alex Evans, David Smith, and Kareem Ettouney, joined by Chris Lee. The studio's first game, LittleBigPlanet, was launched in November 2008.

Auke Jilderda is a sales engineer and technical account manager at CollabNet. Auke began his career at Philips Research studying open source software engineering in an attempt to understand why some projects are spectacular successes while many others fail to gain momentum. Having identified the key aspects that make an open source project successful, he moved on to Philips Medical Systems to deploy these key aspects, as the “inner source” approach, at a major product family program to improve the company’s ability to collaborate across organizational boundaries and locations. In addition, he worked on evolving the division’s software strategy, exploring if, why, when, and where open source solutions can be used to implement commodity parts of a product as viable alternatives to developing them yourself or buying them from a specialized third party.

Four years ago, Auke joined CollabNet’s European field team and today handles a combination of sales engineering, technical account management of strategic accounts, and consulting on collaborative software engineering.

Andy Lester is a software developer and author. For over twenty years, he has worked on and managed teams large and small, from tiny offices to worldwide collaboration. Andy blogs about issues facing the technology worker in The Working Geek (<http://theworkinggeek.com>). His experiences hiring developers led him to write *Land The Tech Job You Love: Why Skills and Luck Are Not Enough* (PragmaticBookshelf, 2009).

Alex Martelli is a member of the Python Software Foundation and works in Mountain View, California, for Google, most often as senior tech lead but currently as senior staff engineer. Alex wrote *Python in a Nutshell* (O’Reilly), and many other books, articles, essays, keynotes, and other conference talks, on Python, numerical computing, and technical management of software development. Alex has an MS (Laurea) degree in electrical engineering from Bologna University; before Google, he worked for Texas Instruments, IBM Research, and think3, and as a freelance consultant. He has also taught courses on programming, development methods, object-oriented design, and numerical computing, at Ferrara University and many other venues.

Steve McConnell Steve McConnell is CEO and Chief Software Engineer at Construx Software where he writes books and articles, consults, teaches classes, and oversees Construx’s software development practices. Steve is the author of: *Software Estimation: Demystifying the Black Art* (2006), *Code Complete* (1993, 2004), *Rapid Development* (1996), *Software Project Survival Guide* (1998), and *Professional Software Development* (2004). His first two books won *Software Development* magazine’s Jolt Excellence award for best programming books of their years.

Steve has worked in the desktop software industry since 1984 and has expertise in project estimation, software construction practices, agile and rapid development methodologies, and outsource software management. In 1998, readers of *Software Development* magazine named Steve one of the three most influential people in the software industry along with Bill Gates and Linus Torvalds. Steve was Editor in Chief of *IEEE Software* magazine from 1998-2002.

Steve is on the Panel of Experts that advises the Software Engineering Body of Knowledge (SWEBOK) project and was Chair of the IEEE Computer Society's Professional Practices Committee. Steve earned a Bachelor's degree from Whitman College and a Master's degree in software engineering from Seattle University.

Andy Oram, an editor at O'Reilly Media, has also been writing articles on technology and its social implications since the mid-1990s (<http://www.praxagora.com/andyo/professional/article.html>). He spent 10 years in the computer industry as a technical writer before trying the publishing field to achieve the same goals of enabling programmers and computer users to achieve their goals effectively.

At O'Reilly, Andy specialized for many years in the open source area, having edited the first books put out by an American publisher on Linux and such ground-breaking works as Peer to Peer, Mastering Regular Expressions, Intellectual Property and Open Source, and Beautiful Code. He is also interested in providing better education for online communities, an issue he has researched at http://www.praxagora.com/community_documentation/. He is a long-time member of Computer Professionals for Social Responsibility.

Tim O'Reilly is the founder and CEO of O'Reilly Media, thought by many to be the best computer book publisher in the world. The company also publishes online through the O'Reilly Network and hosts conferences on technology topics. Tim is an activist for open source, open standards, and sensible intellectual property laws.

Since 1978, Tim has led the company's pursuit of its core goal: to be a catalyst for technology change by capturing and transmitting the knowledge of "alpha geeks" and other innovators. His active engagement with technology communities drives both the company's product development and its marketing. Tim has built a culture where advocacy, meme-making, and evangelism are key tenets of the business philosophy.

Tim has served on the board of trustees for both the Internet Society and the Electronic Frontier Foundation, two organizations devoted to making sure the Internet fulfills its promise. He was on the board of Macromedia until its merger with Adobe. He is currently on the board of CollabNet.

Tim graduated cum laude from Harvard College in 1975 with a B.A. in classics. An archive of Tim's online articles, talks, and interviews can be found at Tim's archive page.

Dr. Maria H. Penedo is a Distinguished Technical Fellow and a senior staff/scientist at Northrop Grumman (NG) Corporation. At NG she has been a leader in the design, insertion, and use of software engineering and information technology into programs, proposals, and the IT organization, especially in the areas of process-based environments, architecture, integration, collaboration, agent, and Web 2.0 technologies. She has applied her enthusiasm and passion for new technology and trends in both the research and project worlds. Her work in the area of distributed collaboration was recognized with a 1998 NG Chairman's Award for Innovation; other honors include multiple Internal Research and Development Honor Roll awards, Woman Technologist of the Year, and a mentorship award.

She has been recognized as a leader in the international software engineering research community, and is an active participant of the leading professional societies in her field. She has published and lectured internationally and served on the program committees of major national and international conferences. She was an editor of the *IEEE Transactions on Software Engineering* and Wiley's *Software Process: Improvement and Practice Journal*, and a Distinguished Visitor of the IEEE Computer Society. She has a BS in mathematics and an MS in computer science from Brazil, and a PhD in computer science from UCLA.

After earning a PhD in mathematics, Dr. Karl Rehmer spent several years teaching mathematics and computer science. Leaving the academic world to get a job at a location where his wife could work on her PhD in computer science, he joined Honeywell Air Transport Systems in Phoenix, Arizona, in 1988. While working there, he was a member of the HADS team that developed the software tools used to develop avionics software for the Boeing 777 aircraft. Following that, Dr. Rehmer joined the Honeywell Research Center where he developed the scheduler for the Deos real-time embedded operating system that has been used for many avionics applications. In 1996, he joined DDC-I, a vendor of software tools for the safety-critical market. He has been the chief architect of the DDC-I Mixed Language Debugger project. Additionally, he has worked on a number of subcontracts for DDC-I customers. He currently is adding support for additional languages and target operating systems to the DDC-I Mixed Language Debugger.

Eric Renkey is a software developer who currently manages a small development team at an integrated energy company. He learned to program many years ago on his family's Atari 800 and has worked as an IT professional since 1995. He is a pleasure to work with, as he'll be happy to tell you. Eric received a B.A. in Psychology from The Pennsylvania State University.

Ned Robinson graduated from Hunter College's Honors program (NYC) with a BA in English literature. As the computer revolution erupted in the 1980s, Ned decided to alter his career goals and taught himself how to program. At first, he programmed in Lotus 123 and dBase 3 but quickly progressed to C and C++. Ned worked for a variety of Wall Street banks until the early 1990s. He then became a lead developer and product manager for Sheridan Software, a Microsoft ISV that specialized in value-added VBX and ActiveX solutions.

As a classically trained pianist, Ned was always interested in merging his technical abilities and his love of music. In 1995, he founded RePlay Technologies, a software company dedicated to the practicing musician. RePlay Technologies ran for five years before Ned sold it and returned to work in the financial district. It was at a small financial services software company that he met Andrew Stellman and, like Andrew, became an advocate for software process. Since he is a developer at heart, he sees process engineering as a way to give back to the development community, as good software process allows developers to really shine and exercise their incredible resourcefulness in bringing business requirements to life.

Johanna Rothman helps leaders solve problems and seize opportunities. She consults, speaks, and writes on managing high-technology product development. She enables man-

agers, teams, and organizations to become more effective by applying her pragmatic approaches to the issues of project management, risk management, and people management.

Johanna publishes “The Pragmatic Manager,” a monthly email newsletter and podcast, and writes two blogs: Managing Product Development and Hiring Technical People. She is the author of several books, including *Manage Your Project Portfolio: Increase Your Capacity and Finish Projects* (in press), *Manage It! Your Guide to Modern, Pragmatic Project Management*, *Behind Closed Doors: Secrets of Great Management* (with Esther Derby), *Hiring the Best Knowledge Workers*, *Techies & Nerds: The Secrets and Science of Hiring Technical People*, and *Corrective Action for the Software Industry* (with Denise Robitaille).

Neil G. Siegel is sector vice president of technology and advanced systems at Northrop Grumman. He has been responsible for many successful fielded military and intelligence systems. Examples include the Blue-Force Tracking system and the Army’s Hunter unmanned aerial vehicle. Programs for which he was responsible have won numerous awards, including the Crosstalk Award in 2001 for one of the five top-quality projects across the entire U.S. government, and the 2003 Monticello Award (given in recognition of an information system that has a direct, meaningful impact on human lives). Among other honors, he was elected to the U.S. National Academy of Engineering in 2005.

Tom Tarka worked at MP3.Com for just over two years, and the experience—the people, the place, the work—left an indelible mark on the person he became. Upon his departure, he picked up his travels where he had left off and spent the better part of a year roaming the United States in a 1971 VW Camper, eventually landing back on the East Coast.

After a brief stint as a mechanic, someone took a chance on Tom and his dusty chemical engineering degree and gave him a job in a field which had intrigued him since childhood: energy. He now works for the U.S. Department of Energy on next-generation power systems and global climate change and is a licensed professional engineer.

Tom resides in Pittsburgh, where he owns a home and a small collection of VW buses.

Tony Visconti’s career as a record producer spans four decades. He is the producer of 12 David Bowie albums, 10 T. Rex albums, and many, many more by British recording artists. In the past two years, Tony has worked with Morrissey, Razorlight, Alejandro Escovedo, Anti-Flag, and Fall Out Boy. He has written his autobiography for Harper Collins titled “Bowie, Bolan and the Brooklyn Boy.”

Karl Wiegers is principal consultant with Process Impact, a software process consulting and education company in Portland, Oregon, where he specializes in requirements engineering, process improvement, and project management. Karl is the author of the books *Software Requirements*, *More About Software Requirements*, *Peer Reviews in Software*, *Practical Project Initiation*, and *Creating a Software Engineering Culture*, as well as numerous articles on many aspects of software, chemistry, and military history. Karl has a PhD in organic chemistry, which he regards as the perfect background for a career in software development. You can reach him at <http://www.processimpact.com>.

