

CURRICULUM VITAE SUMMARY

Joseph William Yoder

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Short Biography

Joseph (Joe) Yoder (agilist, computer scientist, speaker and pattern author) is the founder and principal of The Refactory (www.refactory.com), a company focused on software architecture, design, implementation, consulting, and mentoring on all facets of software development. Joe serves as president of the board of The Hillside Group, a group dedicated to improving the quality of life of everyone who uses, builds, and encounters software systems. Joe is best known as an author of the Big Ball of Mud pattern, which illuminates many fallacies in software architecture. He is also a co-author of the book "A Scrum Book: The Spirit of the Game." Joe teaches and mentors developers on agile and lean practices, software architecture, building flexible systems, clean design, patterns, refactoring, and testing. Joe won the New Directions award at the Software Engineering Institutes (SEI) Software Architecture conference (SATURN), which is given to the presentation that best describes innovative new approaches and thought leadership in the application of architecture-centric practices; his winning presentation was "QA to AQ: Shifting from Quality Assurance to Agile Quality." Joe believes software is still too hard to change. He wants to do something about this and believes that this problem can be approached with good practices, putting the ability to change software into the hands of the people with the knowledge to change it, and bringing the business side closer to the development process.

Educational History

1992-2000: University of Illinois at Urbana-Champaign, Ph.D. Work (Computer Science partially completed)

1989-1992: University of Illinois at Urbana-Champaign, M.S. (Computer Science)

1984-1989: University of Iowa with honors and high distinction B.S. (Computer Science & Mathematics)

Employment Highlights

Joe has been involved with various startups and consulting companies since the early 1990's. Joe is the CEO and CTO of The Refactory. His work has included Architecture, Analysis, Design and Implementation of Enterprise Business Frameworks, and Adaptive Systems such as Adaptive Object Models and Domain Specific Languages. Joe has also performed assessments and evaluations at the architectural level, as well as design, development, testing, and implementation support. He has provided training and mentoring on such topics as Pragmatic Test Driven Development, Agile Practices including Scrum and Kanban, Refactoring, and Advanced Object-Oriented Design with Patterns. The following is a list of some organizations Joe has provided consulting, development, mentoring, research, and/or training: UOL PagSeguro/PagBank, Nubank, IBM, GE Health Care, CERN, Intel, Itau Unibanco, Caterpillar, Motorola, US Navy and Innovative Professional Solutions, US Navy Air Warfare System, Reliance Communications, Communications Security, Donovan Data Systems, MedImpact Healthcare Systems, Utah Education Network, Illinois Department of Insurance, Illinois Department of Public Health, Washington Mutual, Comac, and Iron Mountain.

Expertise

Joe specializes in Architecture, Analysis and Design, Agile Methods, Adaptable Systems, Patterns, Refactoring, Reuse, and Frameworks. Joe has worked on numerous projects using a variety of technologies, ranging from stand-alone to client-server applications, web applications, web services, cloud computing, service-oriented architecture, microservices, multi-tiered, various databases, object-oriented, frameworks, human-computer interaction, collaborative environments, and domain-specific visual-languages. These projects have spanned many domains, including Medical Information Systems, Financial Systems, Ordering, Import, Invoicing, Print, Shipping, Warehouse Management, Manufacturing, Medical Examination, Statistical Analysis, Scenario Planning, a Client-Server Relational Database System for keeping track of shared specifications in a multi-user environment, a Telecommunications Billing System, and Business & Medical Decision Making. Joe is programming-language agnostic and has worked with many programming languages including object-oriented, functional, procedural, logical, and scripting.

Professional Activities:

Joe has presented many keynotes, tutorials, and talks; arranges workshops; and organizes leading technical conferences held throughout the world, including international conferences such as Agile, Agile Brazil, Agile Portugal, Encontro Ágil, AOSD, CBSOFT, GOTO, JAOO, JDD, OOP, QCon, YOW!, <Programming>, PLoP, AsianPLoP, SugarLoafPLoP, EuroPLoP, OOPSLA, ECOOP, SATURN, SPLASH, and TOOLS. He has been on the program committee for many of these conferences. Joe is a long-standing member of the following organizations: ACM, Agile Alliance, and The Hillside Group. He has interacted with professors at University São Paulo, Faculty of Engineering University of Porto, Waseda University, Keio-SFC and others by advising and interacting with PhD and Masters students including being on the PhD defense committees for two successful PhD defenses.

Joe's google scholar web page can be found at: <https://scholar.google.com/citations?hl=en&user=qmz0mOUAAAAJ> and his dblp page can be found at: https://dblp.uni-trier.de/pers/y/Yoder:Joseph_W=.html. The full CV can be found at: <https://joeyoder.com/career/vitae>.

Top Publications (full list can be found at: <https://joeyoder.com/career/vitae>)

Maurício Aniche, Joseph Yoder, Fabio Kon; *“Current challenges in practical object-oriented software design,”* IEEE/ACM 41st International Conference on Software Engineering: New Ideas and Emerging Results, 2019.

Kei Ito, Joseph Yoder, Hironori Washizaki, Yoshiaki Fukazawa; *“A Pattern Language for Handover When People Transition,”* Journal Transactions on Pattern Languages of Programming IV, 2019.

Herez Moise Kattan, Frederico Oliveira, Alfredo Goldman, Joseph William Yoder; *“Mob Programming: The State of the Art and Three Case Studies of Open Source Software,”* Brazilian Workshop on Agile Methods, 2017.

Daniel Cukier and Joseph William Yoder; *“The Artist in the Computer Scientist: More Humanity To Our Research,”* Onward!, Proceedings of the 10th SIGPLAN symposium on New ideas, new paradigms, and reflections on programming and software, 2011.

Joseph W. Yoder, Ralph Johnson; *“The Adaptive Object-Model Architectural Style,”* Proceedings of The Working IEEE/IFIP Conference on Software Architecture 2002 (WICSA3 '02) at the World Computer Congress in Montréal, 2002. Also in Software Architecture System Design, Development and Maintenance edited by Jan Bosch, Morven Gentleman, Christine Hofmeister, and Juha Kuusela; Kluwer Academic Publishers, 2002.

Joseph W. Yoder, Federico Balaguer, Ralph Johnson; *“Architecture and Design of Adaptive Object-Models,”* Technology Presentation at the 2001 Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA 2001). ACM SIGPLAN Notices, ACM Press, 2001.

Brian Foote, Joseph W. Yoder; *“Big Ball of Mud,”* Fourth Conference on Patterns Languages of Programs (PLoP '97) Monticello, Illinois, 1997. Technical report #wucs-97-34, Dept. of Computer Science, Washington University Department of Computer Science, 1997. Pattern Languages of Programs Design 4, edited by Neil Harrison, Brian Foote, and Hans Rohnert. Addison Wesley, 2000.

Joseph W. Yoder, Jeffrey Barcalow; *“Architectural Patterns for Enabling Application Security,”* Fourth Conference on Patterns Languages of Programs (PLoP '97) Monticello, Illinois, 1997. Pattern Languages of Programs Design 4, edited by Neil Harrison, Brian Foote, and Hans Rohnert. Addison Wesley, 2000.

Joseph W. Yoder, Donald F. Schultz, Ben T. Williams; *“The MEDIGATE Graphical User Interface for Entry of Physical Findings: Design Principles and Implementation,”* The Journal of Medical Systems, 1998, Vol 22, No. 5.

Ben T. Williams, Joseph W. Yoder, Donald F. Schultz; *“The MEDIGATE System for Direct Entry of Physical Findings by the Examiner: User Interface Issues,”* Health Evaluation: Searching for the Hidden Defect; Proceedings of The International Health Evaluation Association Annual Symposium on The Art and Science of Preventive Medicine, La Jolla, California USA, Felitti, V.J. ed, pp. 107–114, 1990.

Top Keynotes

“Being Agile about Architecture”: Software Testing Symposium, Tokyo, Japan 2020

“Fundamental IDEALS and DDD for Designing Modern Service-Based Systems”: ITAKE, Romania 2020

“Deliver Value with Confidence: Reconnecting Developers with Agile”: Scrum Rio, Rio de Janeiro, Brazil 2019

“Sustainable Development with Agile”: WBMA AgileBrazil, Campinas, Brazil 2018

“Microservices for Agility: Advantages and Challenges”: CBSoft Industry Track, São Carlos, Brazil 2018

“Being Agile at Quality: Values, Practices, and Patterns”: XP Matsuri, Tokyo, Japan 2018

“Taming Big Balls of Mud and Sustaining Architecture”: First Israel Conference on Software Architecture Conference, Herzliya, Israel 2014

“Sustainable Architecture”: Bank of America Internal Conference, New York City, New York 2014

“Deliver Fast with Confidence”: FAST Smalltalk, Tucumán, Argentina 2016; DevCamp Campinas, Brazil 2017

“Taming Big Balls of Mud with Agile, Diligence, and Hard Work”: SBCARS @ CBSoft, Brasilia, Brazil 2013; Agile Brazil, Florianopolis, Brazil 2014; SugarLoafPLoP, Buenos Aires, Argentina 2016

“Pragmatic, Not Dogmatic TDD: Rethinking How We Test”: CBSoft, Natal, Brazil 2012; Agile Portugal, Porto Portugal 2012

“When Should You Consider Meta Architectures: Using Meta to Scale the Cloud”: SASC, Seoul, Korea 2011; ISSAP, Panama City, Panama 2012

“Big Ball of Mud: Is this the Best Agile Can Do?”: JDD, Krakow, Poland 2011; SBES @ CBSoft, Salvador, Brazil 2010; Agile Portugal, Porto, Portugal 2010

“Ultimate Agility: Let Your Users Do Your Work!”: CBSoft, Salvador, Brazil 2010

“Big Balls of Mud in Agile Development: How to Avoid Them”: Encontro Agil, São Paulo, Brazil 2009

“Software Patterns and Quality”: SPAQu, Tokyo, Japan 2007

“Adaptive Object-Model Architectural Style”: ENEI, Guarda, Portugal 2007