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OBJECTIVE

I thrive when working with great people on disruptive technologies, and/or changing the game by cross-pollinating ideas from different fields or removing assumptions that no longer hold. I am always on the lookout for projects that have this potential and require a mix of technical leadership, innovation, communication skills, entrepreneurship, and business judgment.

HIGHLIGHTS

- Proven ability to envision, partner, drive, and successfully deliver projects spanning multiple groups
- Excellent track record for communicating effectively with executives, partners, and stakeholders
- Demonstrated ability to play multiple roles and interact with all disciplines (dev, UX, test, PgM and PdM)
- Proven ability to secure funding, assemble and manage small teams, rally them behind a vision, identify and effectively engage with partners, and deliver results
- Research background and first-hand work experience in world-class research environments

EDUCATION

- **Ph.D., Computer Science (2000)**, University of Illinois at Urbana-Champaign; dissertation: *Micro-Workflow: A Workflow Architecture Supporting Compositional Object-Oriented Software Development*.
- **M.S., Computer Science (1997)**, University of Illinois at Urbana-Champaign; thesis: *Algebraic Model and Object-Oriented Architecture for Hyper-Media Documents*.
- **Dipl. Ing., Electrical Engineering (1997)**, Politehnica University, Bucharest; thesis: *Numerical Animation and Multimedia*.

EXPERIENCE

Principal Software Development Engineer, Microsoft Windows Phone March 2010-Present

- Developed the next version of Data & Cloud frameworks for Windows Phone 7.
- Defined Key Performance Indicators (KPIs) for the Windows Phone 7 Application Platform.
- Designed and implemented experiments for gauging response time, memory footprint, power consumption.
- Identified, analyzed, and resolved performance problems.

Principal Program Manager, Microsoft Windows Phone 2009-2010

- Drove shaping the Windows Phone 7 API surface area (Location, Accelerometer, RxLINQ, Push Notifications, Browser Control, etc.).
- Drove the inclusion of the .NET Reactive Framework (Rx) on Windows Phone 7.
- Worked with partner groups on ensuring API consistency and 3 screen + cloud alignment.

Principal Program Manager, Microsoft Live Labs 2007-2009

- Drove the development and shipped projects aimed at advancing the state of the art of Internet technologies: [Live Labs Volta](#), [Social Streams](#), and [Web Sandbox](#) (all projects I drove in Live Labs shipped and made headlines).
- Assembled cross-group project proposals for Live Labs Startup Factory Program and consistently secured funding from executives.
- Built and managed cross-group teams comprising architects, developers, testers, designers, advisors, and marketers.
- Drove systematic architecture evaluations and retrospectives for Live Labs projects.

Software Architect, Microsoft patterns & practices (p&p) 2006-2007

- Provided architecture oversight on p&p's guidance projects (Web Client Software Factory, Web Service Software Factory, Web Client Responsiveness Bundles).

- Initiated, led and participated in cross-group incubation projects with VSTS (lightweight requirements), MSR (collaborative, distributed development in Visual Studio), and SQL Server/Live Labs (Volta).
- Improved the engineering practices through architecture evaluation and validation, prototyping, design and code reviews.

Practice Leader, Architecture Evaluation Services, ThoughtWorks; Chicago, IL 2003-2006

Developed and led ThoughtWorks' software architecture evaluation practice. Assisted Global 1000 companies with architecture evaluation, design reviews, product evaluation and selection, enterprise integration, and software development expertise.

J2EE Architect and Technical Manager, S2Tech; Saint Louis, MO 2003

Developed a proposal for a Web-based immunization registry built on the J2EE platform. Reviewed and analyzed requirements, identified issues and project risks, interacted with stakeholders, evaluated alternatives, designed the initial architecture, developed the project plan and cost estimates.

Senior Solutions Architect, Applied Reasoning; Overland Park, KS 2001-2003

Provided consulting services to clients from the telecommunications, insurance, and health care industries. Mentored software engineers and held workshops on software patterns, frameworks, testing, refactoring, and extreme programming. Built, refactored, and extended proprietary Java frameworks for enterprise applications. Wrote technical collateral on Applied Reasoning's Classic Blend family of products.

Assistant Professor, University of Kansas; Lawrence, KS 2001-2002

Taught graduate courses in the Software Engineering program (Programming Language Paradigms, Software Project Management, Software Architecture, and Analysis of Algorithms).

Workflow Engine Consultant, OpenPages; Westford, MA 2001

Performed workflow requirements engineering, interviewed stakeholders, assembled evaluation criteria, and evaluated commercial workflow engines for use within a content-management application.

Smalltalk Consultant, Illinois Department of Public Health; Springfield, IL 1999-2000

Designed and developed components of a blood test result management application for the Illinois Newborn Screening program. Worked with a team of consultants in a VisualAge/DB2 environment on extending an enterprise framework (domain objects; custom object-to-relational persistence layer; GUIs).

BPR Consultant, National Center for Supercomputing Applications; Urbana, IL 1998

Provided Business Process Reengineering and technical know-how to a team of managers and architects with the reengineering of the NCSA allocations process.

System Architect III, ClearSystems; Irving, TX 1997

Designed and built a C++ Call Data Record demultiplexer. Worked on making Innoverse (a Smalltalk telecommunications billing framework) a distributed system.

Research Programmer, National Center for Supercomputing Applications; Urbana, IL 1996-1998

Assisted national body of supercomputer users at NCSA. Installed and maintained GNU software on a variety of supercomputers.

Software Developer, The Broadcasting Service of the University of Illinois; Urbana, IL 1995-1996

Designed and developed a C++-based workflow system for assembling radio and TV program schedules through Web browsers.

Study Grant, Institut National Polytechnique de Grenoble; Grenoble, France 1995

Study grant for Master thesis "Numerical Animation and Multimedia," under the technical guidance of Dr. Radu Zaciu and Professor François Robert. Developed a Web-based visualization tool involving matrix calculus, raytracing and dynamic generation of MPEG videos using C, povray, and the Berkeley software MPEG encoder.

Study Grant, Interuniversity Center for Microelectronics; Leuven, Belgium 1994

Researched the use of artificial neural networks in T-CAD environments (Norman), in the group of Dr. Wim Schoenmaker. Developed AXON, a scientific workflow system involving an artificial neural network-based predictor and a device simulator.

Summer Internship, Centre National d'Etudes des Télécommunications; Bagnex, France 1993
Designed and developed PLC, a C-based system for computerized GaAs wafer characterization by photoluminescence.

Summer Internship, Centre National d'Etudes des Télécommunications; Bagnex, France 1992
Developed MKVD, a C-based system for real-time controlled Metal Organic Vapor Phase Epitaxy (MOVPE) process.

Software Development 1991

Built a C-based PostScript driver within a custom data analysis application for study of novel semiconductor materials at Centre National d'Etudes des Télécommunications (Bagnex, France).

PUBLICATIONS: BOOKS

- *Pattern Languages of Program Design*, Volume 5; lead editor (with Markus Völter and James Noble); Addison-Wesley, 2006.
- *Integration Patterns*; co-author with David Trowbridge, Ulrich Roxburgh, Gregor Hohpe and E. G. Nadhan; Microsoft Press, 2004.
- *Technology of Object-Oriented Languages, Systems, and Architectures*; Contributor, Chapter 4: An Extensible Workflow Architecture with Objects and Patterns; Theo D'Hondt, editor; Kluwer Academic Publishers, 2003.
- *Pattern Languages of Program Design*, Volume 4; Contributor, Chapter 18: Feature Extraction – A Pattern for Information Retrieval; Neil Harrison, Brian Foote, and Hans Rohnert, editors; Addison-Wesley, 2000.

PUBLICATIONS: PAPERS

- [LINO-to-Datacenter](#) (co-author with Erik Meijer), [Cloud Computing and Its Applications \(CCA08\)](#), October 2008, Chicago, Illinois, USA.
- [Volta: Developing Distributed Applications by Recompiling](#) (co-author with Brian Beckman and Benjamin Livshits), IEEE Software, September/October 2008.
- [The Growing Divide in the Patterns World](#) (co-author with Wojtek Kozaczynski, Ade Miller and Jason Hogg), IEEE Software, July/August 2007.
- *Service Orchestration Patterns: Graduating from State of the Practice to State of the Art*, OOPSLA Companion, October 2005, San Diego, CA.
- [Orchestration Patterns](#), Proceedings of the 11th Conference of Pattern Languages of Programming, September 2004, Monticello, IL.
- [Java Thin Clients Revisited: An Architecture for Responsive, Live Wireless Applications](#) (co-author with George Santamarina), OOPSLA Companion, OOPSLA, November 2002, Seattle, WA.
- [Workflow Enactment with Continuation and Future Objects](#), OOPSLA, November 2002, Seattle, WA.
- *Understanding Large Systems*, position paper for the Workshop on Software Archeology, OOPSLA 2001, Tampa, FL.
- [Why Java is Not Suitable for Object-Oriented Frameworks](#) (co-author with Adrian Kunzle), OOPSLA Companion, October 2001, Tampa, FL.
- [Several Patterns for eBusiness Applications](#) (co-author with Adrian Kunzle), Proceedings of the 8th Pattern Languages of Programming (PLoP), September 2001, Monticello, IL.
- *A Micro-Workflow Component for Federated Workflow* (co-author with Ralph Johnson), Workshop on the Implementation and Application of Object-Oriented Workflow Management Systems III, OOPSLA, October 2000, Minneapolis, MN.
- *A Micro Workflow Framework for Compositional Object-Oriented Software Development* (co-author with Ralph Johnson), Workshop on the Implementation and Application of Object-Oriented Workflow Management Systems II, OOPSLA, November 1999, Denver, CO.
- *Dynamic Object Model and Adaptive Workflow* (co-author with Ralph Johnson), Metadata and Active Object-Model Pattern Mining Workshop, OOPSLA, November 1999, Denver, CO.
- [Feature Extraction—A Pattern for Information Retrieval](#), Proceedings of the 5th Pattern Languages of Programming (PLoP), August 1998, Monticello, IL.

- *A Proposal for a Common Infrastructure for Process and Product Models* (co-author with Ralph Johnson), Mid-year Workshop on Applied Object Technology for Implementing Lifecycle Process and Product Models, OOPSLA, July 1998, Denver, CO.
- [*A Scalable Approach to Continuous-Media Processing*](#) (co-author with Klara Nahrstedt), Proceedings of the 8th IEEE International Workshop on Research Issues in Data Engineering (RIDE), February 1998, Orlando, FL.
- [*A Data Flow Pattern Language*](#), Proceedings of the 4th Pattern Languages of Programming (PLoP), September 1997, Monticello, IL.
- [*Link Management Framework for Hyper-Media Documents*](#) (co-author with Klara Nahrstedt), Proceedings of the IEEE International Conference on Multimedia Computing and Systems, June 1997, Ottawa, Canada.
- [*Informed Search Using Equivalent-Class Templates*](#) (co-author with Todd Morgan), Proceedings of the 5th International Conference on Intelligent Systems (ISCA), June 1996, Reno, NV.
- *Interactive Scientific Visualisation: A Novel Approach*, Proceedings of the International Annual Conference on Semiconductors (CAS), the 18th edition, October 1995, Sinaia, Romania.
- *Modeling CMOS Process Design With Neural Structures*, Proceedings of the International Annual Conference on Semiconductors (CAS), the 17th edition, October 1994, Sinaia, Romania.
- *Bragg Mirrors Grown by MOVPE Calibrated In-situ by 514nm Laser Reflectometry* (co-author with Y. Raffle, R. Azoulay, G. Le Roux, L. Dugrand, R. Kuszelewicz and J.C. Michel from France Télécom), Proceedings of the 5th European Workshop on MOVPE and related growth techniques, June 1993, Malmo, Sweden.

TALKS

- [*Building Windows Phone 7 Applications*](#), Australia 2010 Developer Conference (YOW!), December 2010, Melbourne/Brisbane, Australia.
- [*Live Labs Web Sandbox: Securing Mash-ups, Site Extensibility, and Gadgets*](#), Microsoft Professional Developer Conference, October 2008, Los Angeles, CA.
- [*Architecture Refactoring*](#), Microsoft Software Architect Forum, November 2007, Seattle, WA.
- [*Software Patterns, Where Do You Stand?*](#) Microsoft Engineering Excellence, July 2007, Redmond, WA.
- [*Architecture Evaluation in Practice-Notes From the Front Line*](#); the 10th Annual Conference on Software Engineering, Methods, and Best Practices (JAOO), October 2006, Aarhus, Denmark .
- *A Patterns Approach to SOA* (with Boris Lublinsky); BrainStorm Group Conference on Strategies for Developing, Managing and Governing Service-Oriented Architectures, April 2006, Chicago, IL.
- [*Demystifying Orchestration with Patterns*](#); the 9th Annual Conference on Software Engineering, Methods, and Best Practices (JAOO), September 2005, Aarhus, Denmark.
- [*10 Years After: Developments and Trends in the Patterns World*](#); the 9th Annual Conference on Software Engineering, Methods, and Best Practices (JAOO), September 2005, Aarhus, Denmark.
- [*Lessons in Architecture Evaluation*](#); June 2005, International Association of Software Architects, New York Chapter, New York, NY.
- *Orchestration Patterns in Service-Oriented Architectures*; November 2004, Microsoft Southeast Architecture Council.
- *Enterprise Integration Patterns with BizTalk Server 2004*; September 2004, Microsoft Partner Advisory Council, Seattle, WA.
- *Micro-Workflow: A Workflow Architecture Supporting Compositional Object-Oriented Software Development*; October 2000, University of Colorado, Boulder, CO.
- *Micro-Workflow for Business Processes in Object-Oriented Applications*; August 2000, Skyva International, Boston, MA.
- *Using Micro Workflow for the Newborn Screening Followup Process*; May 2000, Illinois Department of Public Health, Springfield, IL.
- *A Micro Workflow Architecture Supporting Compositional Object-Oriented Software Development*; April 2000, CISCO Systems, Inc., Urbana, IL.
- *An Object-Oriented Framework for On-Line Registrations*, Caterpillar, Inc., Peoria, IL.
- *Reusable Architectures for Multimedia*; December 1997, Hewlett-Packard Labs, Palo Alto, CA.

PROFESIONAL ACTIVITIES

- Host, [Mobile Track, GOTO 2011 International Software Development Conference](#), Aarhus, Denmark.
- Organizer, Web 2.0 Pattern Mining Workshop at the TOOLS Europe 2008 conference, Zurich, Switzerland.
- Conference Chair, the 6th Annual Conference on the Pattern Languages of Programs (PLoP) 1999, Allerton Park, IL, USA.

PATENTS AND INNOVATION

Over 30 patents pending covering mobile, search, distributed system development, cloud computing, collaboration, Internet technologies, and social media and networking.

ODDS AND ENDS

- Work eligibility: US citizenship.