

# Martin J. Schedlbauer

## Curriculum Vitae

### CONTACT INFORMATION

5 Tavern Circle  
Sudbury, MA 01776  
USA

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### EDUCATION

Sc.D.	University of Massachusetts Lowell	2006	Computer Science
	<i>Dissertation Title: An Empirically Derived Model for Predicting Completion Time of Cursor Positioning Tasks in Dual-Task Environments</i>		
M.Sc.	University of Massachusetts Lowell	1991	Computer Science
B.S.	University of Lowell (summa cum laude)	1988	Computer Science

### EXPERIENCE

<b>Managing Principal</b>	The Cathris Group (Systems Consulting & Education)	2002 to Present
<b>Lecturer</b>	Northeastern University College of Computer and Information Sciences	2008 to Present
<b>Adjunct Professor</b>	University of Massachusetts Lowell	2006 to Present
<b>Instructor &amp; Consultant</b>	Boston University (Corporate Education)	2006 to Present
<b>CTO, VP</b>	BEA Systems, Inc.	1999 to 2001
<b>Founder, CEO, CTO</b>	Technology Resource Group, Inc. (acquired by BEA Systems, Inc.)	1995 to 1999
<b>Co-Founder</b>	Hands-On Technology Transfer, Inc. (Education & Training)	1994
<b>Founder, CEO</b>	Help Connection, Inc.	1994
<b>Consultant</b>	Schedlbauer & Associates	1991 to 1994
<b>Adjunct Professor</b>	Middlesex Community College	1990 to 1991

## PUBLICATIONS

### REFEREED CONFERENCE PUBLICATIONS

Holzinger, A., Höller, M., Schedlbauer, M., & Urlesberger, B. (2008). Fitts' Law in Real Life Medical Scenarios: Performance of Finger versus Stylus. In *Proceedings of Information Technology Interfaces (ITI 2008)*, Dubrovnik, Croatia, July 2008.

Schedlbauer, M., & Heines, J. (2007). Selecting While Walking: An Investigation of Aiming Performance in a Mobile Work Context. In *Proceedings of the 13th Americas Conference on Information Systems (AMCIS)*, Keystone, Colorado, August 9-12, 2007 (Recipient of Best HCI Paper, Best Conference Paper Honorable Mention).

Schedlbauer, M. (2007). Completion Time Predictions of Touch-Screen Interactions in Dual-Task Situations. In *Proceedings of the 29th Annual Conference on Information Technology Interfaces (ITI 2007)*, Dubrovnik, Croatia, June 2007.

Micire, M., Schedlbauer, M., & Yanco, H. (2007). Horizontal Selection: An Evaluation of a Digital Tabletop Device. In *Proceedings of the 13th Americas Conference on Information Systems (AMCIS)*, Keystone, Colorado, August 9-12, 2007.

Schedlbauer, M. (2007). Effects of Key Size and Spacing on the Completion Time and Accuracy of Input Tasks on Soft Keypads using Trackball and Touch Input. In *Proceedings of the Human Factors & Ergonomics Society 51st Annual Meeting*, Baltimore, MD, October, 2007.

Pastel, R., Champlin, H., Harper, M., Paul, N., Helton, W., Schedlbauer, M., & Heines, J. (2007). The Difficulty of Remotely Negotiating Corners. In *Proceedings of the Human Factors & Ergonomics Society 51st Annual Meeting*, Baltimore, MD, October, 2007.

Schedlbauer, M. (2007). A Configurable Platform for the Interactive Exploration of Fitts' Law and Related Movement Time Models. *Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI 2007)*, San Jose, CA, April 2007.

Schedlbauer, M., Pastel, R., & Heines, J. (2006). Effect of Posture on Target Acquisition with a Trackball and Touch Screen. In *Proceedings of 28th Annual Conference on Information Technology Interfaces (ITI 2006)*, Dubrovnik, Croatia, June 2006, 257-262 (Recipient Best Student Paper Award).

Schedlbauer, M., Williams, M. & Grinstein, G.. (1989). Issues in the Implementation of an Interactive Visualization Environment. *Third Annual X Technical Conference*, MIT Press.

Schedlbauer, M. (1989) An I/O Management System for the iPSC/1 Hypercube. In *Proceedings of the 17th ACM Annual Computer Science Conference*, Louisville, KY, p. 400.

### REFEREED WORKSHOP PUBLICATIONS

Heines, J., & Schedlbauer, M. (2007). Teaching Object-Oriented Concepts through GUI Programming. *Eleventh Workshop on Pedagogies and Tools for the Teaching and Learning of Object-Oriented Concepts*, European Conference on Object-Oriented Programming, Berlin, Germany, July 2007.

Schedlbauer, M., & Pastel R. (2007). A Tool for Enabling Scientific Exploration of Human Performance Models in HCI Education. In *Proceedings of HCI Educators 2007*, Aveiro, Portugal, March, 2007, pp. 116-121.

#### REFEREED JOURNAL PUBLICATIONS

Schedlbauer, M., & Udin, D. (2000). How to Successfully Migrate to Java. In *More Java Gems*, D. Deugo (ed.), Cambridge University Press.

Schedlbauer, M. (1997). The Benefits of Mentoring. *Journal of Object-Oriented Programming*, 10(1), 28-29.

Schedlbauer, M. (1997). How to Select a Training Organization. *Journal of Object-Oriented Programming*, 10(6), 39-40.

#### COURSE GUIDES (RECENT)

Schedlbauer, M. (2007). Applying Business Analysis in Iterative and Adaptive Projects. Boston University Corporate Education Center (TechSkills, Inc.), Tyngsboro, MA.

Schedlbauer, M. (2007). Writing Effective Use Cases. Boston University Corporate Education Center (TechSkills, Inc.), Tyngsboro, MA.

#### NON-REFEREED PUBLICATIONS

Schedlbauer, M. (2007). Workflow Modeling with UML. *Business Analysis Times*, August 2007.

Schedlbauer, M. (1998). Recruiting Techies from Within. *Training Magazine*, March-April 1998, pp. 16-19.

Schedlbauer, M, Grinstein, G., & Seetharaman, K.. (1990). An Interactive Visualization System in Motif/C++. Xhibition'90, *First Annual Industry X Conference*, Santa Clara, CA, pp 7-12.

#### TECHNICAL REPORTS

Schedlbauer, M. (2007). A Survey of Manual Input Devices. Technical Report 2007-002, Computer Science Department, University of Massachusetts, Lowell, MA.

Schedlbauer, M. (2007). A Survey of Human Cognitive and Motor Performance Models. Technical Report 2007-001, Computer Science Department, University of Massachusetts, Lowell, MA.

Schedlbauer, M., & Heines, J. (2005). An Extensible and Interactive Research Platform For Exploring Fitts' Law. Technical Report 2005-015, Computer Science Department, University of Massachusetts, Lowell, MA.

Williams, M., Bergeron, R., Grinstein, G., Pecelli, G., Pickett, R., Schedlbauer, M., Smith, S., & Streeter, S. (1989). The Architecture of the Exvis Kernel, Technical Report R-89-004, Computer Science Department, University of Lowell, Lowell, MA.

## RELEASED SOFTWARE

Movement Time Evaluator HCI Research Workbench, Available at <http://www.cs.uml.edu/~mschedlb/mte>. Used for research at NASA, University of Regensburg (Germany), University of Graz (Austria), Michigan Technological University, University of Calgary (Canada).

## TEACHING

## UNIVERSITY COURSES

ISU470	Information Systems Analysis & Design <i>Northeastern University</i>	Spring & Fall 2008
91.513	Internet & Web Systems I (Graduate Level) <i>University of Massachusetts Lowell</i>	Spring & Fall 2008
91.573	Database I (Graduate Level) <i>University of Massachusetts Lowell</i>	Fall 2006

## CORPORATE COURSES (PARTIAL LIST)

Requirements Modeling, Research-In-Motion, Waterloo, Canada  
 Business Systems Analysis, Boston University Corporate Education  
 Workflow and Business Process Modeling, Boston University Corporate Education  
 Requirements Engineering with Use Cases, Boston University Corporate Education  
 Requirements Planning & Communication, Boston University Corporate Education  
 Data and Object Modeling, Boston University Corporate Education  
 Software Quality Assurance, Boston University Corporate Education  
 Developing Web Services with Java, Boston University Corporate Education  
 Advanced Java Programming, University of Massachusetts Lowell  
 Distributed Systems with J2EE & EJB, Hands-On Technology Transfer  
 Developing GUIs with Java and Swing, Hands-On Technology Transfer  
 Java Programming, Hands-On Technology Transfer  
 XML Programming, Hands-On Technology Transfer  
 C++ Programming, Hands-On Technology Transfer  
 C#.NET Programming, Hands-On Technology Transfer  
 Object-Oriented Analysis & Design with UML, Hands-On Technology Transfer  
 X Window System and Motif Programming, Hands-On Technology Transfer  
 Relational Database Design & SQL Programming, Technology Resource Group  
 Effective Use Case Analysis, Technology Resource Group  
 Advanced C++ Programming Techniques, Technology Resource Group  
 Developing Web Applications, Technology Resource Group  
 Client/Server Systems Development, Technology Resource Group  
 Advanced Design Patterns, Technology Resource Group  
 Fundamentals of Data Warehousing, Technology Resource Group

## ACADEMIC ACTIVITIES

### INVITED TALKS

Business Process Modeling with UML, IIBA Meeting, Houston, TX, July 2008  
 Workflow Modeling with UML, Workshop at Business Analysis World, Toronto, 2008  
 Considerations for the Design of Nomadic Data Entry Devices, Colloquium at  
 Merrimack College, Department of Computer Science, January 23, 2008.  
 Object-Oriented Analysis & Design with UML, Workshop at World Congress for  
 Business Analysts, Anaheim, CA, November 2007  
 Deriving Use Cases from Business Processes, IIBA Boston Chapter, October 2007  
 Workflow Modeling with UML, IIBA Minneapolis Chapter, July 2007  
 Business Analysis Case Study: Lessons Learned, Business Analysis World,  
 Washington, D.C., May 2007  
 Introduction to Modeling with UML, OOP '99, Munich, Germany, 1999 (in German)  
 Componentizing Legacy Applications, Application Development '99, London, 1999  
 Use Case Analysis, Object World Europe, Munich, Germany, 1998  
 The EXVIS Visualization System, ZGDV, Darmstadt, Germany, 1990 (in German)  
 C++ Programming, University of Darmstadt, Germany, 1990 (in German)  
 Presentations at UNIFORUM, X World, Object World, Component Development

### REVIEW ACTIVITY

Reviewer, 30<sup>th</sup> Conference on Information Technology Interfaces, ITI 2008  
 Reviewer, 10<sup>th</sup> International Conference on HCI with Mobile Devices, MobileHCI 2008  
 Reviewer, 16<sup>th</sup> European Conference on Information Systems, ECIS 2008  
 Reviewer, 13<sup>th</sup> Americas Conference on Information Systems, AMCIS 2007  
 Reviewer, 29<sup>th</sup> Conference on Information Technology Interfaces, ITI 2007  
 Reviewer, alt.chi, 2007

### GRANT ACTIVITY

2009-2011	National Science Foundation (co-PI) <i>Ideas With Handles: Tangible Modeling Tools for Creative Discovery in IT</i> with Dr. Sarah Kuhn (PI) and Dr. Fred Martin (co-PI)	\$198,000 (Pending)
2008	NCWIT Academic Alliance Seed Funding <i>Tangible Modeling Tools for Collaborative Learning and Design in IT</i> with Dr. Sarah Kuhn (PI) and Dr. Fred Martin (co-PI)	\$15,000 (Not Funded)
2008	Sparx Systems, Ltd. (Software Grant) <i>Academic Licenses for Enterprise Architect (UML-based Requirements and MDG Tool)</i>	\$1,750

2008	National Science Foundation (Travel Grant) <i>CRA Academic Careers Workshop, Washington, DC</i>	\$2,000
2007-2008	Edgewater Technologies (PI) <i>Development of Systems Analysis Artifacts and Metrics to Support Iterative &amp; Sequential Lifecycle Models</i>	\$5,000
2007	TechSkills (PI) <i>Research and Authoring of Use Case Models for Software Requirements Planning &amp; Management</i>	\$16,000
2006	National Science Foundation (Travel Grant) <i>Academy of Software Engineering Education &amp; Training, Oahu, HI</i>	\$1,650
2005	Microsoft Research (co-PI) <i>Instructional Modules on User Interface Programming for the Tablet PC</i> with Jesse Heines (PI)	Not Funded

#### STUDENT SUPERVISED

Christopher Granz, ISET Undergraduate Scholar (HCI Research)

#### COLLABORATIONS

University of Regensburg (Germany), Faculty of Applied Psychology  
 Medical University of Graz (Austria), Faculty of Medical Informatics  
 Michigan Technological University, Human-Computer Interaction Research Group

### PROFESSIONAL ACTIVITIES

#### BOARD ACTIVITY

Emeritus Member, Board of Advisors, College of Arts & Sciences, University of Massachusetts, Lowell, MA.  
 Emeritus Member, Board of Advisors, Solaris Outsourcing LLC  
 Emeritus Member, Board of Advisors, ISDG LLC  
 Emeritus Member, Board of Advisors, Gorilla Cookies LLC  
 Emeritus Member, Board of Advisors, Providio LLC  
 Emeritus Member, Board of Directors, Hands-On Technology Transfer, Inc.

#### MEMBERSHIPS

Member, Association for Computing Machinery (ACM)  
 Member, Institute for Electrical and Electronics Engineers (IEEE)  
 Member, American Information Society (AIS)

Member, International Institute of Business Analysis (IIBA)  
Former Member, Object Management Group Affiliate Counsel (OMG)

#### CONSULTING

Agile Software Methods Development, Edgewater Technologies, Wakefield, MA  
Entrepreneurial Business Consulting, Growth Systems, Inc., Chico, CA  
Courseware Authoring & Editing, Hands-On Technology Transfer, Chelmsford, MA  
Curriculum Design, Boston University Corporate Education Center, Tyngsboro, MA  
Software System Design, Wellesley College, Wellesley, MA  
Business Consulting, Solaris Outsourcing, Burlington, MA

#### LANGUAGES & CULTURAL BACKGROUND

Naturalized U.S. Citizen; born in Germany  
Fluent in English and German; conversational in French; some knowledge of Greek  
Coast Guard Licensed Captain (Master 100GT)

#### REFERENCES

Dr. Jesse Heines, University of Massachusetts Lowell, heines@cs.uml.edu  
Dr. Sarah Kuhn, University of Massachusetts Lowell, sarah\_kuhn@cs.uml.edu  
Dr. Holly Yanco, University of Massachusetts Lowell, holly@cs.uml.edu  
Dr. Robert Pastel, Michigan Technological University, rpastel@mtu.edu  
Dr. Thomas Costello, University of Massachusetts Lowell, tom@cs.uml.edu  
Prof. William Moloney, University of Massachusetts Lowell, bill@cs.uml.edu