

# JamieRasmussen

Software Engineer and HCI Researcher

4936 Ellsworth Ave  
Pittsburgh, PA 15213

[jrasmuss@alum.mit.edu](mailto:jrasmuss@alum.mit.edu)  
<http://jamierasmussen.com>

U.S. Citizen

## Employment

### **IBM Research, Advisory Software Engineer** 03/2007 - Present

Core team member of the Center for Innovation in Visual Analytics, part of the Business Analytics and Mathematical Sciences group. Led user interface design and implementation for numerous research projects, including an employee social media analysis dashboard, a retention analytics platform, and an exploratory salesforce visualization. Contributing engineer to research prototypes in the domains of intelligence analysis, network security, and social networking. Several of my contributions are being productized by IBM's Software Group. Received an IBM Research Division Award for user interface contributions to a stream processing system. Authored technical reports, academic publications, patents, and grant applications. Gave frequent presentations to clients. Mentored graduate and undergraduate student interns. Promoted from Staff Software Engineer in June, 2008.

### **Epson Research & Development, Inc., Member of Technical Staff** 09/2004 - 03/2007

Design and code for major portions of an innovative videoconferencing system used daily within Epson. Primarily responsible for the Windows client, a large, multithreaded, C++ application. Also worked on a Linux port, server improvements in C++ and Java, and research prototypes in a variety of languages. Principal author of a multi-year project proposal for the software group. Work led to five issued and one pending patent, in the areas of interactive user interfaces, audio delay profiling, and an application of sketch recognition.

### **Solitex Networks, Software Engineer** 08/2003 - 09/2004

Design and code for a commercial SQL Server-backed website for interfacing with the Federal and State Do Not Call datasets. Custom-built account and user management and billing systems. Core development and extensions to the AOLserver platform including interfaces to POP3, MIME, and SMTP services.

### **Media Lab Europe, Research Fellow** 08/2001 - 08/2003

Conducted research in novel learning technologies as part of the Everyday Learning Group. Projects included computational toys for exploring plant physiology, a wearable device for monitoring and simulating environmental tobacco smoke exposure, and a web-based environment for sharing multimedia learning objects. Responsible for frequent presentations to academic, corporate, and government audiences.

### **MIT Information Systems, Student Developer** 05/1999 - 08/2001

Designed and developed several Windows applications in C, C++, and Perl. Projects included a Kerberos-enabled port monitor, a makefile system for creating installers, and an automated nightly build and packaging system.

## Education

### **Massachusetts Institute of Technology** 09/1997 - 06/2001

#### **B.S. in Mathematics with Computer Science**

Course work included: Software Engineering of Innovative Web Services, Theory of Computation, Cryptography and Cryptanalysis, Algorithms, Theory of Numbers, Mathematical Logic, Spatial Imaging Systems, Principles of Internet Computing, Probability, Linear Algebra, Modern Algebra, and Analysis.

## Technical Skills

Advanced knowledge of Java, JavaScript, C/C++, TCL, SQL, and HTML. Experience with Ruby, C#, Perl, Visual Basic, XML, and Scheme. Experience with data analysis and many kinds of analytics. Proficient with multimedia processing on web, desktop, server, and handheld platforms.

Extensive experience with many types of software, including IDEs, databases (PostgreSQL, DB2, SQL Server), version control (git, Jazz, svn, cvs), installer development, raster and vector graphics packages (Adobe, Corel), mathematical packages, internet applications, and office productivity suites.

## Refereed Publications

N. Sadat Shami, Jiang Yang, Laura Panc, Casey Dugan, Tristan Ratchford, **Jamie C. Rasmussen**, Yannick Assogba, Tal Steier, Todd Soule, Stela Lupushor, Werner Geyer, Ido Guy, and Jonathan Ferrar. Understanding Employee Social Media Chatter with Enterprise Social Pulse. In the 17th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW). 2014.

Tak Yeon Lee, Casey Dugan, Werner Geyer, Tristan Ratchford, **Jamie C. Rasmussen**, N. Sadat Shami, and Stela Lupushor. Experiments on Motivational Feedback for Crowdsourced Workers. In Seventh International AAI Conference on Weblogs and Social Media (ICWSM). 2013.

Kush Varshney, **Jamie C. Rasmussen**, Aleksandra Mojsilovic, Moninder Singh, and Joan Morris DiMicco. Interactive Visual Salesforce Analytics. International Conference on Information Systems (ICIS). 2012.

Kate Ehrlich, Susanna E. Kirk, John F. Patterson, **Jamie C. Rasmussen**, Steven I. Ross, and Daniel M. Gruen. Taking advice from intelligent systems: the double-edged sword of explanations. Proceedings of the 16th International Conference on Intelligent User Interfaces (IUI). 2011.

**Jamie C. Rasmussen**, Kate Ehrlich, Steven I. Ross, Susanna E. Kirk, Daniel M. Gruen, and John F. Patterson. Nimble Cybersecurity Incident Management through Visualization and Defensible Recommendations. In Proceedings of the Seventh International Symposium on Visualization for Cyber Security (VizSec). 2010.  
**Best Long Paper Award**

Susanne C. Hupfer, Steven I. Ross, **Jamie C. Rasmussen**, James E. Christensen, Stephen E. Levy, Daniel M. Gruen, and John F. Patterson. Crafting an environment for collaborative reasoning. In Proceedings of the 14th International Conference on Intelligent User Interfaces (IUI). 2009.

Daniel M. Gruen, **Jamie C. Rasmussen**, Jiahui Lui, Susanne C. Hupfer, and Steven I. Ross. Collaborative reasoning and collaborative ontology development in CRAFT. AAI Spring Symposium on Semantic Web and Knowledge Engineering (SWKE). 2008.

Mauro Cherubini, **Jamie C. Rasmussen**, Hugh Gash, and Tom McCloughlin. Digital Seed: An interactive toy for children's explorations of plant growth and life cycles. Interaction Design and Children Workshop. 2002.

**Jamie C. Rasmussen**, Deirdre Butler, and Glorianna Davenport. A Web-based Environment for Assembling Multimedia Learning Stories in Irish Primary Education. In Proceedings, IEEE International Conference on Advanced Learning Technologies (ICALT). 2002.

## Other Publications

Salvador Ochoa, **Jamie C. Rasmussen**, Christine Robson, and Michael Salib. Reidentification of individuals in Chicago's homicide database: A technical and legal study. Massachusetts Institute of Technology. 2001.

**Jamie C. Rasmussen**, Steven I. Ross, Daniel M. Gruen, Susanne C. Hupfer, Stephen E. Levy, James E. Christensen, and John F. Patterson. Program Parameterization through Ontology-Based Models. IBM Research, Technical Report (Prior Art Disclosure). 2009.

## Patents

James E. Christensen, Daniel M. Gruen, Susanne C. Hupfer, Stephen E. Levy, John F. Patterson, **Jamie C. Rasmussen**, and Steven I. Ross. System and method for ontology-based location of expertise. United States 8,255,380. Issued August 28, 2012.

James E. Christensen, Daniel M. Gruen, Susanne C. Hupfer, Stephen E. Levy, John F. Patterson, **Jamie C. Rasmussen**, and Steven I. Ross. Method and apparatus for semantic just-in-time information retrieval. United States 8,244,706. Issued August 14, 2012.

Victor Ivashin and **Jamie C. Rasmussen**. Efficient image annotation display and transmission. United States 8,099,662. Issued January 17, 2012.

Victor Ivashin, Steven Nelson, and **Jamie C. Rasmussen**. Delay profiling in a communication system. United States 7,908,147. Issued March 15, 2011.

**Jamie C. Rasmussen** and Victor Ivashin. Selection of regions within an image. United States 7,865,017. Issued January 4, 2011.

Victor Ivashin, **Jamie C. Rasmussen**, and Steven Nelson. Presenter view control system and method. United States 7,634,540. Issued December 15, 2009.

Victor Ivashin and **Jamie C. Rasmussen**. Viewport panning feedback system. United States 7,274,377. Issued September 25, 2007.

James E. Christensen, Stephen E. Levy, Daniel M. Gruen, Susanne C. Hupfer, **Jamie C. Rasmussen**, and Steven I. Ross. Automatic Generation of an Interest Network and Tag Filter. United States 12/639,784. Pending.

Steven Nelson, Victor Ivashin, and **Jamie C. Rasmussen**. Software Plugin Modules for Device Testing. United States 11/923,464. Pending.

## Reviewing

Information Visualization, 2010.

IEEE Software, Special Issue on Cooperative and Human Aspects of Software Engineering, 2009.

**References Available Upon Request**