

# Irina Ros

**Objective** To obtain a position that allows me to engage in creative and complex engineering problems, design challenges, rapid prototyping, constant learning, frequent communication with end users and participation in communities within my discipline.

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**Education** **May 2006** **University of Massachusetts at Amherst** **MA**

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- Bachelors of Science in Computer Science - GPA: 3.848
- Graduated with Honors (*Summa Cum Laude*) from Commonwealth College
- Relevant Courses: Advanced data structures; Programming language paradigms; Computer Architecture; Advanced computer Algorithms; Software Engineering I and II; Operating Systems; Society and computing; Artificial Intelligence; Computer Networking, Project Management

**Skills**

- *Programming Languages:* JavaScript (jQuery, Prototype), Ruby on Rails, Git, Java, C++, XQuery, XPath, CSS, PHP, ASP, Ant, HTML, Shell Scripting, Lotuscript, UML, Scheme, Lisp, TCL
- *Operating Systems:* Unix, MacOSX, Windows, AIX
- *Software:* Textmate, Eclipse, Cygwin, Postgresql, MySQL, Adobe Photoshop, Illustrator & InDesign, Macromedia Flash, MS Visual Studio, Websphere Portal, Lotus Domino, Notes, Designer, Administrator. VMWare Workstation, Vi

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**Work Experience** **06/2008 - Present** **Collaborative User Experience Group – Visual Communication Lab, IBM Research** **Cambridge, MA**

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- Research Developer
- Designed, developed and deployed Many Bills (<http://manybills.us>), an innovative web based visualization of Congressional Legislation as part of a long-term agenda to investigate innovative ways to visualize text and promote government transparency. Conducted iterative user studies to evaluate application and wrote two publications describing aspects of the system. Extensively utilized JavaScript to develop the visualization and Ruby on Rails on the server side.
- Ported from J2EE to Ruby on Rails and further developed the Many Eyes (<http://many-eyes.com>) collaborative visualization tool that allows users to gather data, visualize it, and discuss their visualizations. Designed and Developed features and components for the application.
- Designed/developed features/UI and assisted in launching the New York Times Visualization Lab (<http://vizlab.nytimes.com>), which is a derivation of Many Eyes.

*Skills and Toolsets used:* Ruby on Rails, JavaScript (jQuery, Prototype), UI design, Java, Textmate, Apache configuration, Memcached, test driven development, deployment, css, design patterns, such as mvc, visualization theory, database optimization, performance monitoring and server optimization, RMagick, git

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**2005-2008 Lotus, IBM Westford, MA**

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- Staff Software Engineer
- Designed, architected and led the development of a static server analysis engine for a new product offering, Lotus Domino Configuration Tuner (DCT.)DCT analyzes existing servers for Domino best/worst practices. In conjunction, led the first IBM product integration of Saxon, an XQuery open source engine.

*Skills and toolsets used:* XML schema architecture, competitor analysis and reverse engineering, open source community involvement and integration, communication with design partners, best and worst practices discovery and analysis, development in Java, LotusScript and xQuery using Eclipse, MS Visual Studio and Domino Designer.

- Maintained, extended and developed features for the Domino Web Administration client, currently the most complex shipping Domino application, and Domino Foundation classes, a collection of JavaScript UI widgets.

*Skills and toolsets used:* JavaScript, LotusScript, HTML, Deep understanding of Firefox vs. IE compatibility issues and development, Firefox development and debugging

- Designed and developed a multiple server integration wizard that configures collaboration between WebSphere Portal, Lotus Domino, Quickplace and Sametime. Shipped with Portal 6.01.

*Skills and toolsets used:* Project Management, Java, InstallShield, Ant scripting, Lotus Domino, Quickplace and Sametime, WebSphere Portal, Server administration, Technical Research, Documentation

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**2004 Chiliad, Inc Amherst, MA**

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- Quality Engineering Intern
- Functional quality engineering for a 'concept search' distributed search engine. Responsibilities included writing and execution of functional regression tests.

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**2004 Hamilton Sundstrand, UTC Windsor Locks, CT**

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- Software Engineering Intern
- Portal and Dashboard Gadget Development and Administration, Design and development of an expression parser, Database design, operation and management, Workflow creation, maintenance and Administration

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**2003-2004 Daily Collegian, University of Massachusetts Amherst, MA**

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- Night Production Supervisor
- Responsible for layout and assembly of newspaper layout for print. Required interaction with editors, graphic designers and business department. Used Quark express, Adobe Photoshop and Illustrator.

**Publications**

- Y. Assogba, I.Ros, M. Mckeeon, 2010. '**Many Bills: Visualizing the Anatomy of Congressional Legislation**'. Under evaluation for InfoVis 2010.

- Y. Assogba, I. Ros, M. Mckee, 2010. '**DocBlocks: Communication-minded Visualization of Topics in U.S. Congressional Bills**', Work in Progress in CHI 2010.  
[http://ireneros.com/papers/DocBlocks\\_Final\\_CHI.pdf](http://ireneros.com/papers/DocBlocks_Final_CHI.pdf)
- I. Ros, 2006. '**Medical Modeling: A Case Study Modeling Adult Outpatient Chemotherapy Using Little-JIL**', Undergraduate Thesis,  
[http://ireneros.com/file\\_download/1/Thesis.pdf](http://ireneros.com/file_download/1/Thesis.pdf)
- B. Wallace, W.R. Adrion, P. Dickson, W. Cooper, I. Ros and K. Watts, 2006: '**Evolution of a cross-platform, multimedia courseware presentation system**', submitted to: ACM Transactions on Internet Technology, June 2006,  
<http://manic.cs.umass.edu/about/pubs/2006ToITsubmission.pdf>
- B. Wallace, W. Burlson, B. Donovan, J. Kurose, I. Ros, and M. Zink, 2006: '**Integrating CASA ERC Wireless Networking into Education**', 9th International Conference on Engineering Education, San Juan, Puerto Rico, July 2006,  
[http://www.casa.umass.edu/publications/uploads/tmp\\_f6i8a7n1.pdf](http://www.casa.umass.edu/publications/uploads/tmp_f6i8a7n1.pdf)

#### **Honors**

Dean's list (2002-2006), Undergraduate Outstanding Student in Software Engineering Award at graduation, Microsoft Student Ambassador (2005-2006), Mentioned in 'Significant Bits' a bi-annual publication of the Computer Science department, Computer Science Talent Advancement Program resident (2002) and mentor (2004-2006), Computer Science Achievement Award

#### **Attributes**

Big fan of problem solving and building things from scratch, strong work ethic, quick learner, great team player with leadership skills, creative thinker, deadline driven