

## Jonathan Bell

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CONTACT INFORMATION	<p>Department of Computer Science Columbia University 450 Computer Science Building 500 W 120th Street Mail Code 0401 New York, NY 10027 USA</p>	<p>Mobile: (Redacted from WWW) Office: +1-212-939-7184 Fax: +1-212-939-7084 E-mail: <a href="mailto:jbell@cs.columbia.edu">jbell@cs.columbia.edu</a> WWW: <a href="http://www.jonbell.net">www.jonbell.net</a></p>
RESEARCH INTERESTS	Collaborative work, software engineering, software reliability, software systems, cyber-physical systems, computer science education	
EDUCATION	<p><b>Columbia University</b>, New York, NY USA</p> <p>Ph.D., <b>Computer Science</b>, Expected May 2015</p> <ul style="list-style-type: none"><li>• Advisor: <b>Professor Gail Kaiser</b></li><li>• Area of Study: Software Engineering</li></ul> <p>M.S., <b>Computer Science</b>, May 2011</p> <p>B.S., <b>Computer Science</b>, May 2010, <i>Cum Laude</i></p>	
CONFERENCE SERVICE	<p>Workshop Co-Organizer: 2<sup>nd</sup> International Workshop on Games and Software Engineering, Co-Located with the 34<sup>th</sup> International Conference on Software Engineering (ICSE), Zurich, Switzerland, June 9, 2012.</p> <p>Student Volunteer: Systems, Programming, Languages and Applications: Software for Humanity Conference (SPLASH), Portland, OR, October 21–28, 2011.</p> <p>Student Volunteer: 33<sup>rd</sup> International Conference on Software Engineering (ICSE), Waikiki, Honolulu, Hawaii, May 21–28, 2011.</p>	
AWARDS AND HONORS	<p><b>Andrew P. Kosoresow Memorial Award for Excellence in Teaching and Service</b>, Columbia University Department of Computer Science. Given to a student in Computer Science who has performed exemplary service to the department, devoting time and effort beyond the call to further the department's goals. 2010.</p>	
PUBLICATIONS	<ol style="list-style-type: none"><li>1. Sheth, S., <b>J. Bell</b>, and G. Kaiser (2011). HALO (Highly Addictive, socialLly Optimized) Software Engineering. In: <i>Proceeding of the 1st international workshop on Games and software engineering</i>. GAS '11. Waikiki, Honolulu, HI, USA: ACM, pp.29–32. <a href="http://jonbell.net/publications/halo">http://jonbell.net/publications/halo</a>.</li><li>2. <b>Bell, J.</b>, S. Sheth, and G. Kaiser (2011). Secret ninja testing with HALO software engineering. In: <i>Proceedings of the 4th international workshop on Social software engineering</i>. SSE '11. Szeged, Hungary: ACM, pp.43–47. <a href="http://jonbell.net/publications/halo-sse">http://jonbell.net/publications/halo-sse</a>.</li></ol>	
TEACHING EXPERIENCE	<p><b>Columbia University</b>, New York, NY USA</p> <p><i>Teaching Assistant</i></p>	<p><b>September 2009 to Present</b></p> <ul style="list-style-type: none"><li>• Head TA for COMS 4156: Advanced Software Engineering<ul style="list-style-type: none"><li>• Autumn 2009, 2010, 2011</li><li>• Supported 30 students debugging and integrating EJB applications</li><li>• Graded student designs, programs, and documentation</li></ul></li></ul>

- Lectured on EJB implementation
- Created a shared git, Confluence, and JIRA environment to support student projects
- Developed supplementary course material, including EJB tutorials and sample documents, archived online at <https://ase.cs.columbia.edu/confluence/display/CS4156F11/Home>
- TA for COMS 4444: Programming and Problem Solving
  - Autumn 2010
  - Created simulators for testing student submissions
  - Developed and executed tournaments to compare and evaluate student projects.
  - Organized students software development efforts
  - Course page archived online at: <http://www.cs.columbia.edu/~kar/4444f10/>

PROFESSIONAL AND RESEARCH EXPERIENCE **Columbia University**, New York, NY USA

*Graduate Research Assistant* **January 2011 to Present**

- Perform research tasks with the **Programming Systems Laboratory**
  - Investigated new collaborative work tools to assist computational biologists as part of the **genSpace** project.
  - Researched productivity enhancing tools for software engineers as part of the **HALO-SE** project.
  - Supervised undergraduate and masters students working with the lab.
  - Responsible for administrative tasks within the group, including administering lab of 20+ desktops and 8 servers and refurbishing lab furniture.

**RentPost, LLC**, Atlanta, GA

*Co-Founder and Advisor* **January 2011 to Present**

- Assist in hiring new developers
- Provide general software engineering guidance

*Chief Technology Officer* **May 2010 to January 2011**

- Designed the architecture for and implemented a tenant - landlord relations management package
- Managed product feature integration, release schedules, and development process
- Developed server infrastructure to support sales of flagship product
- Worked with PHP, MySQL, SQL Server, and JIRA on Mac OS X, Windows, and Linux

**Columbia University School of Engineering, Office of the Dean**, New York, NY

*Systems Manager and Developer* **September 2006 to January 2011**

- Reported directly to the Dean to design decision-supporting data mining and reporting systems
- Designed, maintained, and implemented custom web applications
- Managed a self service account agreement with Apple
- Planned purchase and installation of 50 Apple Mac Pros, 4 XServe, 7 Linux servers and a Zimbra cluster
- Worked with PHP, Java, MySQL and SQL Server on Mac OS X, Windows and Linux

**Codestreet**, New York, NY

*Intern, Software Engineering*

**April 2008 to April 2009**

- Re-engineered SQL Server-based reporting solution for a new bond trading platform
- Expanded automated business intelligence reporting
- Worked with SQL Server and Visual Studio in a primarily Windows environment

**Sikorsky Aircraft**, New York, NY

*Intern, Operations Analysis*

**May 2007 to August 2007**

- Lead programmer in a team creating a simulator for natural and terrorist disaster response
- Worked in Java with Eclipse, OpenGL, ArgoUML, CVS, and JavaDoc

SERVICE

**Association for Computing Machinery (ACM)**

*Member*

**April 2008 to present**

- ACM SIGSOFT Member (2011–present)
- ACM SIGPLAN Member (2011–present)
- Columbia ACM Student Chapter Vice President (2008–2009)

**Institute of Electrical and Electronics Engineers (IEEE)**

*Member*

**October 2011 to present**

- IEEE Computer Society Member (2011–present)

**Columbia University Department of Computer Science**, New York, NY

*Barbecue Czar*

**January 2011 to present**

- Planned and executed semesterly barbecue for students, faculty, and staff
- Purchased decorations and food; coordinated cooking

**Columbia University Office of Residential Programs**, New York, NY

*Community Advisor*

**September 2008 to May 2010**

- Served as a peer mentor for 16 Resident Advisors
- Developed mediation and conflict resolution skills
- Created monthly building-wide programs for 500 residents
- Acted as “first responder” to student crises while on call

STUDENT ADVISING **Jason Halpern**, “Understanding user retention in *genSpace*,” graduate research, Columbia University, Fall 2011.

**Miriam Melnick**, “HALO-SE web portal,” undergraduate research, Columbia University, Fall 2011.

**Ning Yu**, “Suggesting data sets for users of *genSpace*,” graduate research, Columbia University, Fall 2011.

**Evgeny Fedetov**, “Towards social diversity in tool recommendations with *genSpace*,” graduate research, Columbia University, Summer 2011.

**Aditya Bir**, “Managing complex data sets in *genSpace*,” graduate research, Columbia University, Spring 2011.

SOFTWARE  
SKILLS

Programming Languages:

- C, C++, CSS, FLEX/AS3, HTML, Java, JavaScript, Perl, PHP, Lisp, SQL, MySQL, and others

Design Concepts/Tools:

- AJAX, CogTool, Eclipse, Glasfish, Java EE, JavaDoc, NetBeans, Propel, SOAP, Symfony, UML

Server Technologies:

- Apache, Linux Administration, MySQL, Oracle, SpamAssassin, SQL Server, qmail, Zimbra Server

Productivity Applications:

- T<sub>E</sub>X (L<sub>A</sub>T<sub>E</sub>X, B<sub>B</sub>T<sub>E</sub>X), Vim, MS Office, Apple iWork

Operating Systems:

- Apple Mac OS (System 7 - OS 10.7), including Mac OS X Server
- Windows (XP - 7), including Windows Server 2005, 2008
- Linux (particularly CentOS and Debian), and most UNIX variants