

# Wendy Liu

ilostwaldo@gmail.com

<http://dellsystem.me>

London, UK

## Education

2010–2014	<b>McGill University</b> Bachelor of Science in Math and Computer Science
2008-2010	<b>International School of Beijing</b> International Baccalaureate certificate in 4 higher level and 2 standard level courses

## Programming skills

<b>Web</b>	HTML, CSS, LESS, Javascript, jQuery, AngularJS, Django, PHP, Node.js
<b>Software</b>	git, vim, L <sup>A</sup> T <sub>E</sub> X, nginx
<b>Other</b>	Python, Java, C, SQL, Ruby, Bash
<b>General</b>	I'm most comfortable with *NIX environments, and have experience with managing database systems (PostgreSQL, MongoDB, Riak) as well as with Amazon Web Services. I enjoy designing interfaces, building applications, and solving challenging problems.

## Professional experience

2014–present	<b>Co-founder and CTO</b> at Macromeasures <ul style="list-style-type: none"><li>• Primary architect of a robust system for large-scale social data analysis</li></ul>
2013	<b>Software Engineering Intern</b> at Google San Francisco <ul style="list-style-type: none"><li>• Primary UI developer on capacity planning team</li><li>• Launched table and plotting widgets and improved UI for internal data visualisation tool</li></ul>
2012	<b>Web developer</b> for Agora Octave, an official code-sharing site for GNU Octave <ul style="list-style-type: none"><li>• Designed graphics and implemented layouts for a modern redesign of the site</li><li>• Worked with existing Django codebase to implement features such as syntax highlighting, file uploading/browsing, and archive extraction via an asynchronous task queue</li><li>• Selected by GNU Octave to work on Agora as one of two participants in the European Space Agency's "Summer of Code In Space" 2012</li></ul>
2011–2014	<b>Researcher</b> for Professor Derek Ruths' Network Dynamics lab at McGill University <ul style="list-style-type: none"><li>• Developed a large-scale system for analysing Twitter data to infer demographic statistics</li><li>• Implemented a modular and extensible framework using python for data analysis</li><li>• Co-authored several papers in peer-reviewed journals and conferences (see publications)</li></ul>
2011–2012	<b>Web developer</b> for Professor Ichiro Fujinaga's DDMAL lab at McGill University <ul style="list-style-type: none"><li>• Developed Diva.js, a Javascript-based document viewer for efficiently viewing high-resolution document images (<a href="http://ddmal.music.mcgill.ca/diva">http://ddmal.music.mcgill.ca/diva</a>)</li><li>• Worked on interface and system design and programming for various projects within the lab, using PHP, Python (Django, Tornado), and Javascript (jQuery, Objective-J)</li></ul>

## Volunteer activities

- |           |   |
|-----------|---|
| 2013-2014 | <b>Web developer</b> for Cité Libre, the revival of a political publication first founded in 1950 <ul style="list-style-type: none"><li>• Built custom platform for publishing articles with multilingual support</li></ul>   |
| 2010-2014 | <b>Lead developer</b> for Wikinotes.ca, a free note-sharing website for McGill students <ul style="list-style-type: none"><li>• Designed and led development of wiki-like platform (built with Django)</li><li>• Contributed course notes (using Markdown and T<sub>E</sub>X for math) and moderated content</li></ul>  |
| 2011-2014 | <b>Undersecretary-General-IT</b> for McGill Model United Nations 2013 and 2014 <ul style="list-style-type: none"><li>• Part of organising committee for yearly conference consisting of 1400 delegates from universities worldwide and 500 student staff from McGill University</li><li>• Designed and developed public-facing website (<a href="http://www.mcmun.org">http://www.mcmun.org</a>), with an easy-to-use system for managing registration, invoices, and other aspects of the conference</li></ul> |
| 2007-2014 | <b>Moderator and website team member</b> for phpBB (forum software, GPLv2) <ul style="list-style-type: none"><li>• Graphic design and maintenance for the phpBB website (since 2011)</li><li>• Provided support through the support forums and the IRC channel</li><li>• Moderated the board by handling reports, enforcing rules, assisting users</li></ul>  |
| 2011-2013 | <b>Server administrator</b> for McGill University's Computer Task Force <ul style="list-style-type: none"><li>• Designed and built the group's public-facing website (<a href="http://taskforce.sus.mcgill.ca">http://taskforce.sus.mcgill.ca</a>)</li><li>• Assisted with computer deployment and imaging, as well as user-facing IT issues</li></ul>  |
| 2011-2011 | <b>Undersecretary-General-IT</b> for Secondary Schools United Nations Symposium 2011 <ul style="list-style-type: none"><li>• Directed the setup and maintenance of various IT equipment during the conference</li><li>• Designed and developed public-facing website, with integrated registration, invoicing, discussion forums, and management for other aspects of the conference (1100 attendees)</li></ul>   |

## Programming portfolio

I contribute code to existing open source projects as well as personal projects, usually under a free license. Most of my code is available online at <http://github.com/dellsystem>

## Publications

- |      |  |
|------|--|
| 2013 | <b>Liu W</b> , Ruths D. What's in a name? Using first names as features for gender inference in Twitter. <i>AAAI 2013 Spring Symposium on Analyzing Microtext</i> . Stanford, CA.  |
| 2012 | Hankinson A, Burgoyne J.A., Vigliensoni G, Porter A, Thompson J, <b>Liu W</b> , Chiu R, Fujinaga I. (2012). Digital document image retrieval using optical music recognition. <i>Proc. of the 13th Intl. Society for Music Information Retrieval Conference</i> . Porto, Portugal.   |
| 2012 | Hankinson A, <b>Liu W</b> , Pugin L, Fujinaga I. (2012). Diva: A Web-Based High-Resolution Digital Document Viewer. <i>Proceedings of the Conference on Theory and Practice in Digital Libraries</i> . Paphos, Cyprus. P. Zaphiris, G. Buchanan, E. Rasmussen, F. Loizides, eds., Lecture Notes in Computer Science 7489, Heidelberg: Springer. 45560. |
| 2012 | Al Zamal F, <b>Liu W</b> , Ruths D. Homophily and Latent Attribute Inference: Inferring Latent Attributes of Twitter Users from Neighbors. <i>International AAAI Conference on Weblogs and Social Media</i> . Poster paper. 2012-05-20.  |
| 2012 | <b>Liu W</b> , Al Zamal F, Ruths D. Using Social Media to Infer Gender Composition of Commuter Populations. <i>International AAAI Conference on Weblogs and Social Media</i> . Workshop paper. 2012-05-20.   |
| 2011 | Hankinson A, <b>Liu W</b> , Pugin L, Fujinaga I. Diva.js: A Continuous Document Viewing Interface. <i>Code4lib Journal</i> . Issue 14, 2011-07-25.   |