

Olivia Mae Waring

Seattle WA

EDUCATION:

Master of Science, Computer Science, 2015 (pending thesis defense) University of Oxford, UK
Research concentration: Applying the principles of quantum information flow to natural language processing.

Master of Studies, General Linguistics and Comparative Philology, 2013 University of Oxford, UK
Outcome: Distinction
Research concentration: Large-scale parallel analysis of Mandarin, Standard Tibetan, and Baima Tibetan (an endangered language of contested origin) using Lambek syntactic calculus. Conducted fieldwork in Sichuan, China.

Bachelor of Arts, Chemistry (certificate in Chinese Language), 2012 Princeton University, NJ
Outcome: Summa cum Laude, Phi Beta Kappa, Sigma Xi Book Award for Outstanding Research.
Selected Coursework: Systems Programming; Computing for the Physical Sciences; Advanced Quantum Mechanics/Thermodynamics; Intensive Advanced Chinese; Intensive Intermed. German; Intensive Ancient Greek.

PROFESSIONAL EXPERIENCE:

Microsoft: Software Engineer (Bing) May 2015-Present
Member of the Entity Linking and Semantic Understanding team and dev owner of the entity stamping pipeline, pursuing dramatically improved entity stamping precision and coverage.

National Public Radio: NPR Labs Research and Development Intern January-May 2015
Developed a platform-agnostic measurement UI (Python) that allows member stations to automatically enforce government-mandated loudness standards.

East West Center: Research Intern October-December 2014
Conducted research into policy relations between the US and Asia and wrote regular articles detailing these findings. Codified and analyzed Indian economic data for presentation at a Brookings Institute briefing.

USAID: India Science and Technology Communications Intern September 2014-May 2015
Participated in the design and implementation of a marketing plan for communicating USAID's recent investments in science and technology development programs in India. (Part-time offsite position.)

Oxford Department of Computer Science: Teaching Assistant/Demonstrator January-May 2014
Responsible for reviewing and reinforcing the material covered by an undergraduate artificial intelligence course in small-group settings, marking students' homework, and assisting during practical coding sessions.

Center for Advanced Study of Language (CASL): Research Assistant July-October 2013
Wrote debugging software (Python, XML, SFST) for an automated morphological parser used for processing text in languages critical to national security.

University of Tokyo Research Internship Program (UTRIP): Guest Researcher July-August 2012
Acquired super-resolution images using TIRF microscopy and PALM. Designed and implemented customized cluster-analysis software in MATLAB based on autocorrelation functions and Ripley's K Function.

Heidelberg Institute for Theoretical Studies: Guest Researcher June-July 2011
Used GROMACS software to conduct molecular dynamics pulling simulations on a titin immunoglobulin domain protein, for the purpose of investigating the influence of mechanical force on disulfide bonds.

TECHNICAL SKILLS:

- Programming languages/software (in order of decreasing proficiency): Java; Python; C; C#; Haskell; MATLAB; HTML; CSS; Javascript; SQL; BASH; XML; R; LaTeX; MS Office; Wordpress; Adobe Flash; GROMACS.
- Federal Communications Commission-approved Amateur Radio Technician. (Knowledge of Morse Code.)
- Multimedia tools: Marantz recorders, Audacity, MTE, NPR's Newsflex platform.

LANGUAGES:

- **Mandarin Chinese:** Professional proficiency. 1st place in 2010 National Chinese Bridge Speech and Talent Competition. The only non-native Mandarin-speaking emcee for an internationally televised Chinese New Year's Celebration (2011). Participated in a two-month intensive immersion course in Beijing.
- **German:** Professional proficiency. Participated in a one-month intensive immersion course in Munich.
- **Italian:** Conversational proficiency. 1st Place in 2006 National Italian Competition.
- **French:** Conversational proficiency. Attended Middlebury Language School 2014 on a Kathryn Davis Fellowship.
- **Hindi/Urdu:** Conversational proficiency. Selected to attend an International Summer School in New Delhi.
- **Tibetan, Japanese, Arabic, Latin, Attic Greek:** elementary spoken/reading proficiency.

CONFERENCES AND SELECTED PUBLICATIONS:

- First Oxbridge Women in Computer Science Conference (27 Feb 2014): presented a poster on conjecture synthesis in *Quantomatic*. <https://www.cl.cam.ac.uk/events/owcsc2014/posters.html>
- Travel blog chronicling experiences in Tokyo, Japan. <https://myhovercraftisfullofunagi.wordpress.com/about/>
- Current events blog maintained for Deb Amos's class in international journalism (featuring a 10-minute "mock radio broadcast" on minority language policy in China). <https://thegreaterwall.wordpress.com/>
- "Alcatraz Prison Refashioned into Gallery for Chinese Artist and Dissident." *Asia Matters for America*. 15 Dec 2014. EWC. <http://www.asiamattersforamerica.org/china/alcatraz-prison-refashioned-into-gallery-for-chinese-artist-and-dissident>
- "South Carolina Governor Undertakes Diplomatic and Personal Journey to India." *Asia Matters for America*. 4 Dec 2014. <http://www.asiamattersforamerica.org/india/south-carolina-governor-undertakes-diplomatic-and-personal-journey-to-india>
- "Latest Disney Release Billed as a 'Love Letter' to Japan." *Asia Matters for America*. 19 Nov 2014. EWC. <http://www.asiamattersforamerica.org/japan/latest-disney-release-billed-as-a-love-letter-to-japan>.
- "North America and Asia Embark upon an 'Astronomical' Collaboration." *Asia Matters for America*. 12 Nov 2014. EWC. <http://www.asiamattersforamerica.org/asia/north-america-and-asia-launch-an-astronomical-collaboration>.
- "Asian American Voter Turnout Trends." *Asia Matters for America*. 28 Oct 2014. EWC. <http://www.asiamattersforamerica.org/asia/asian-american-voter-turnout-trends>

ACADEMIC HONORS:

- Kathryn Davis Fellowship for Peace: "Investing in the Study of Critical Languages" May 2014
- Shortlisted for the Oxford University Student Union Student-Led Teaching Award April 2014
- ITO Foundation for International Education Exchange Scholarship December 2013
- Two-time Rhodes Scholar Finalist November 2011 and November 2013
- Grace Hopper Celebration of Women in Computing NSF Scholarship October 2013
- Friends of Todai Summer Research Grant July - August 2012
- Sigma Xi Book Award for Outstanding Research June 2012
- Daniel M. Sachs Class of 1960 Graduating Scholarship December 2011
- DAAD (German Academic Exchange Service) Research Scholarship June-July 2011
- Shapiro Prize for Academic Excellence 2008-2009 and 2009-2010

ACTIVITIES/INTERESTS:

Science and Technology:

- **Oxford Women in Computer Science Society:** Board Member
- **Oxford University Gilbert and Sullivan Society:** Webmaster and IT Chair
- **Princeton Women in Science Colloquium:** Treasurer

Music/Drama:

- **Oxford Schola Cantorum** ("The University's premier chamber choir"): Soprano, Interim Publicity Officer
- **Princeton University Chinese Music Ensemble:** Founder and President
Collaborated with a local guzheng (Chinese zither) expert to bring guzheng lessons to the campus community.
Worked to raise awareness of traditional Chinese instruments and establish Princeton's first Chinese orchestra.
- 13 years of private **violin lessons**; Princeton University Sinfonia
- 4 years of private **voice lessons**; church cantor; Princeton University Chamber Choir
- Numerous credits in **musical theater, drama, and chamber music**