

Education

- 2013–2015 **Master's (M.S.E.), Computer Science**, *Johns Hopkins University*, Baltimore, MD.
Focus subjects: Natural language processing, machine learning, computer security.
Cumulative grade point average: 3.90.
- 2008–2012 **B.Sc., CS**, *University of North Carolina at Chapel Hill*, Chapel Hill, NC.
Minors: Linguistics, Japanese. Cumulative GPA: 3.74.

Professional and research experience

- 2014–present **Research Assistant**, *Dr. David Yarowsky*, CS, Johns Hopkins, Baltimore, MD.
Massively multilingual feature projection and morphological resource construction from semi-structured HTML, professional translators, and crowdsourcing. *Python*.
- 2013–2014 **Graduate Assistant**, *Dr. Mark Dredze*, CS, Johns Hopkins, Baltimore, MD.
Machine learning system development for Tobacco Watcher, a Google News-like Web site that tracks global events concerning tobacco-related businesses and public policy. Online: tobaccowatcher.org. *Python (Django), Java*.
- 2012 **Student System Administrator**, *ibiblio*, Chapel Hill, NC.
System maintenance and upkeep for one of the world's largest digital archives, hosting over 250 Web sites, including Project Gutenberg and Groklaw, and 1,500 user accounts. Online: ibiblio.org. *Mixed Debian and CentOS infrastructure, Puppet, Python, PHP*.
- 2012 **Undergrad Research Asst.**, *Dr. Fabian Monroe*, CS, UNC-CH, Chapel Hill, NC.
Models of mental conversions between orthographic (written) and phonetic (spoken) forms for the generation of easily communicated one-time security strings, using the concept of *phonetic edit distance* from known dictionary words. *Python*.
- 2009–2011 **Undergrad Research Asst.**, *Dr. Gary Bishop*, CS, UNC-CH, Chapel Hill, NC.
Game development and playtesting supervision for Hark the Sound, a Web-based educational platform for children with visual and other learning impairments. Online: harkthesound.org, github.com/uncopenweb. *JavaScript (Dojo), HTML, Python*.
- 2010 **Intern**, *SAS Institute*, Cary, NC.
Internal CMS development. *Java (Hibernate and Spring), PHP, XSLT, MySQL*.
- 2009 **Intern**, *IBM Software Group*, Research Triangle Park, NC.
Demonstration software for Blue Spruce, a real-time collaborative Web application framework that now serves as the basis for the Dojo Foundation's Open Cooperative Web Framework. Online: opencoweb.org. *JavaScript (Dojo), Python, XMPP*.

Leadership and volunteering

- 2011–2012 **Undergrad Curriculum and Planning Cmte.**, CS, UNC-CH, Chapel Hill, NC.
Faculty and student committee for proposing and reviewing changes to UNC's undergraduate computer science curriculum, including addition and removal of courses, revision of degree requirements, and guidelines for departmental advising.

2011–2012 **President**, *Undergraduate Computer Science Club*, UNC–CH, Chapel Hill, NC.
Planning and coordination of peer education sessions, job and research talks, and social events for undergraduate CS students.
Department-sponsored tutoring for students in introductory-level CS courses.
Volunteer organization for refurbishing of donated corporate workstations to serve as educational technology grants for children without household computer or Internet access, in partnership with the Kramden Institute (Durham, NC).

Selected publications

- 2015 John Sylak-Glassman, Christo Kirov, David Yarowsky, and **Roger Que**. A universal feature schema for rich morphological annotation. In *Fourth International Workshop on Systems and Frameworks for Computational Morphology*, Stuttgart.
- 2015 John Sylak-Glassman, Christo Kirov, David Yarowsky, and **Roger Que**. A language-independent feature schema for inflectional morphology. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics*, Beijing. Association for Computational Linguistics.

Society memberships

Inductee, *Phi Beta Kappa Society*, Alpha Chapter, Chapel Hill, NC.

Inductee, *Upsilon Pi Epsilon*, Johns Hopkins University Chapter, Baltimore, MD.
International honor society for the computing and information disciplines, endorsed by the ACM and IEEE Computer Society.

Scholarships, honors, and awards

2010–2011 **Charles H. Dunham Scholarship**, *SAS Institute*.

2009 **Meritorious Winner**, *COMAP Mathematical Contest in Modeling*.

With Robert Pan and Matt Hernandez.

Online: <http://www.comap.com/undergraduate/contests/mcm/>.

2008–2012 **University Trademark Scholarship**, *University of North Carolina at Chapel Hill*.

2008–2012 **National Merit Scholarship**, *National Merit Scholarship Corporation*.

Languages

English **Native**

Mandarin **Native (conversational)**

Simplified script

Japanese **Conversational**

JLPT N2

Skills and technologies

Python 2 & 3 Django, NumPy, Twisted

Linux admin Debian– and Red Hat–based

Web frontend HTML, CSS, SASS

Other langs Ruby, JavaScript, Java, PHP

Databases MySQL, SQLite, PostgreSQL

VCSes Git, Mercurial, Subversion