MichelleFullwood

about

Cambridge, MA
maf@mit.edu
www.mit.edu/~maf
github.com/michelleful

programming

Python, Django, Flask
JavaScript, jQuery
R, Perl, Matlab/Octave
SQL, git

languages

native English
advanced French
Mandarin
intermediate Arabic
elementary Japanese
Hungarian

awards

National Science Foundation
2011 NSF Graduate Research Fellowship

Cornell University
2004 Merrill Scholar
2001 College Scholar
2000 Dean's Scholar
2002,2004 Achievement Awards in Arabic
2000–2004 Dean's List

Government of Singapore
2000 PSC Overseas Merit Scholarship

summary

Graduate student in linguistics with a background in speech and language processing and web development in Python

education

since 2010 **Ph.D. program in Linguistics, Massachusetts Institute of Technology**
Research on problems in computational morphology and formal phonology
Coursework in linguistics, machine learning and Bayesian techniques
Teaching assistant in introductory linguistics and phonology

2000–2004 **B.A. in Linguistics and Mathematics, Cornell University**
Graduated *magna cum laude* and with distinction in all subjects, 4.0 GPA
Study abroad, Fall 2003: Budapest Semesters in Mathematics

experience

2008–2010 **Web Developer, Imperial Consulting** Boston, MA
Developed web applications, both front and back end, in Python, Django and jQuery, for clients in fields ranging from education to biomedical to finance

2008–2009 **External Consultant, Centre for Strategic Infocomm Technologies**
Advised client on evaluation procedures in speech and natural language processing

2004–2008 **R&D Engineer, later Consultant, Centre for Strategic Infocomm Technologies** Singapore
Researched techniques and built engines for speech recognition, language and speaker identification, and cross-language information retrieval
Managed projects to evaluate and acquire systems

2004 **Summer Intern, PARC** Palo Alto, CA
Engineered a computational Lexical Functional Grammar to cover the basic sentence constructions of Modern Standard Arabic
Built a root-and-pattern-based finite state Arabic morphological analyzer

projects

since 2012 **Bayesian inference of non-concatenative morphology**
Extending state-of-the-art Bayesian techniques for morphological learning to the more complex case of non-concatenative morphology (Arabic, Hebrew)
Wrote a Markov Chain Monte Carlo (MCMC) sampler in Python to perform inference on a Bayesian generative model of non-concatenative morphology

2014 **Fuzzy Arabic Dictionary** fuzzyarabic.herokuapp.com
Developed a beginner-friendly Arabic dictionary that can be queried without knowing how to spell in Arabic, mashing up the Yamli transliteration service and the free Buckwalter Arabic Morphological Analyzer

since 2013 **Volunteer tutor, PyLadies Boston**
Deliver presentations on beginner and intermediate Python topics and tutor women who are learning to program in Python