MichelleFullwood

about

Cambridge, MA
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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

Available September 2015. Full-stack developer with 8 years of experience in Python. Background in speech & language processing and web development. Excellent analytic skills honed via degrees in linguistics and mathematics and a penchant for solving puzzles.

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 custom web applications, front and back end, in Python, Django and jQuery, for clients in education, biomedical and finance industries

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** MIT
- Extended 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 probabilistic model of non-concatenative morphology

2014 **Fuzzy Arabic Dictionary** fuzzyarabic.herokuapp.com
- Developed a novel Arabic learners' dictionary that can be queried via non-exact transliteration, mashing up the Yamli transliteration service and Buckwalter Arabic Morphological Analyzer

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