

# W Spence Green

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CONTACT INFORMATION	Computer Science Department Stanford University	spencegreen.com
RESEARCH INTERESTS	Natural language processing, machine translation, Arabic, statistical parsing, and machine learning.	
EDUCATION	<b>Stanford University</b> , Stanford, CA USA <i>Doctor of Philosophy</i> , Computer Science <b>August 2011 – present</b> <i>Master of Science</i> , Computer Science <b>August 2008 – present</b> <ul style="list-style-type: none"><li>• Expected graduation date: December 2011</li><li>• Advisor: Professor Chris Manning</li></ul> <b>University of Virginia</b> , Charlottesville, VA USA <i>Bachelor of Science</i> , with highest distinction <b>August 2001 – May 2004</b> <ul style="list-style-type: none"><li>• Major: Computer Engineering</li><li>• Minor: Religious Studies</li><li>• Advisor: Professor Ron Williams</li></ul>	
HONORS AND AWARDS	National Science Foundation Graduate Fellowship (NSF), 2011-2014 National Defense Science and Engineering Graduate Fellowship (NDSEG), 2008-2011 Trustee Scholarship, Lafayette College, 2000-2001 Engineering Fellowship, Washington University in St. Louis, 2000 (declined)	
PUBLICATIONS	Spence Green, Marie-Catherine de Marneffe, John Bauer and Christopher D. Manning. 2011. <i>Multiword Expression Identification with Tree Substitution Grammars: A Parsing tour de force with French</i> . In EMNLP. Spence Green, Nicholas Andrews, Matt Gormley, Mark Dredze, and Christopher D. Manning. 2011. <i>Cross-lingual Coreference Resolution: A New Task for Multilingual Comparable Corpora</i> . Technical Report 6, Johns Hopkins University. Spence Green and Christopher D. Manning. 2010. <i>Better Arabic Parsing: Baselines, Evaluations, and Analysis</i> . In COLING. Spence Green, Michel Galley, and Christopher D. Manning. 2010. <i>Improved Models of Distortion Cost for Statistical Machine Translation</i> . In NAACL. Spence Green, Conal Sathi, and Christopher D. Manning. 2009. <i>NP subject detection in verb-initial Arabic clauses</i> . In Proceedings of the Third Workshop on Computational Approaches to Arabic Script-based Languages (CAASL3). Michel Galley, Spence Green, Daniel Cer, Pi-Chuan Chang, Christopher D. Manning. 2009. <i>Stanford University's Arabic-to-English Statistical Machine Translation System for the 2009 NIST Evaluation</i> . The 2009 NIST Open Machine Translation Evaluation Meeting. Spence Green. 2004. <i>Development of a Prescription Drug Management System (SmartPill)</i> . Undergraduate Thesis, University of Virginia, Department of Electrical and Computer Engineering.	
PROFESSIONAL EXPERIENCE	<b>Google, Inc.</b> , Mountain View, CA USA <b>Summer 2011</b> <i>Software/Research Intern, Google Translate</i> Developed a syntactic language model for improving translation from English to languages with richer grammatical agreement relations. Improved English-to-Arabic translation. <b>Johns Hopkins University</b> , Baltimore, MD USA <b>Summer 2010</b> <i>Student Researcher, Human Language Technology Center of Excellence</i> Participated in the SCALE 2010 research workshop. Advised by Prof. Mark Dredze. Developed new models for cross-lingual coreference resolution.	

**Northrop Grumman Corp.**, Baltimore, MD USA **2004 – 2008**

*Technical Lead, Postal Automation Systems* **2007 – 2008**

Responsible for design and implementation of the operations management platform for the \$1 billion USPS Flats Sequencing System (FSS). Systems development in .NET 2.0/3.0 technologies. Led a customer Critical Design Review (CDR).

*Project Manager, Abu Dhabi, UAE* **2006 – 2007**

Managed an 11-person, international team. Reorganized a struggling 3-year effort and delivered a new air defense planning product in ten months. Implemented software processes, organized training, implemented code inspections and quality control, led a customer Critical Design Review (CDR).

*Software / Field Engineering, Abu Dhabi, UAE* **2005 – 2006**

Supported UAE Air Force and Air Defense (AFAD) EADGE system. Successfully closed-out company's warranty obligation; resolved over 80 software problems in 14 months. Significant customer interaction at colonel/major command levels.

*Professional Development Program* **2004 – 2005**

*SD&T* — Software design lead, DARPA ASSIST program. Designed image-collection software used by U.S. Army for IED detection in Iraq. Significant customer interaction in addition to technical responsibilities.

*EW Digital Systems* — EA-6B Prowler ICAP III electronic warfare program. Responsible for FPGA firmware and hardware on two radar arrays.

**Lockheed Martin Aeronautics Corp.**, Marietta, GA USA **Summer 2003**

*Software Engineer, Advanced Development Programs (The Skunk Works)*

Designed a 3D flight path modeling application for the F/A-22 and F-35 test programs.

**SPARTA Inc.**, Huntsville, AL USA **Summer 2002**

*Hardware Engineer*

Analyzed various defense systems.

ACADEMIC SERVICE *Program Reviewer:*

- International Joint Conference on Artificial Intelligence (2011)
- Empirical Methods in Natural Language Processing (2011)
- Conference on Natural Language Learning (2011)
- Workshop on Machine Translation (2011)
- Workshop on Statistical Parsing of Morphologically Rich Languages (2011)

*Journal Reviewer:*

- MT Journal (2010)
- International Journal of Document Analysis and Recognition (2011)

LANGUAGES English (native), Arabic (fluent).

PROGRAMMING Ada83/95, ASP.NET, C, C++/.NET, C#, Java, Javascript (+jQuery), L<sup>A</sup>T<sub>E</sub>X, MATLAB, Markup languages (HTML, XML, SGML, etc.), Python, Shell scripting(Tcl, bash, etc.), VHDL.

INTERESTS Running, scuba diving (certification: IANTD CCR Full Trimix), backpacking, reading, writing.

REFERENCES

**Prof. Dan Jurafsky**

Professor  
Department of Linguistics  
Stanford University  
Stanford, CA USA

**Prof. Christopher D Manning**

Associate Professor  
Computer Science Department  
Stanford University  
Stanford, CA USA

**Prof. Ronald D Williams**

Professor  
University of Virginia  
Department of Electrical and Computer Engineering  
Charlottesville, VA USA

**Mr. Paul Sesto**

Engineering Manager  
Northrop Grumman Corp.  
Electronic Systems Division  
Baltimore, MD USA