

Kristen Parton

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- SPECIALTIES** Natural language processing; cross-lingual and multilingual applications; machine translation; information retrieval.
- EDUCATION** Ph.D., Computer Science, **Columbia University**, October 2012.
Dissertation: Lost and Found in Translation: Cross-Lingual Question Answering with Result Translation
Adviser: Professor Kathleen McKeown
M.S., Computer Science, **Columbia University**, 2008.
B.S., Computer Science, **Stanford University**, 2003.
- PHD RESEARCH**
- Developing algorithms that improve machine translation output by automatically detecting and correcting semantic “lost in translation” errors.
 - Building better systems for cross-lingual search that improve result relevance as well as translated result understanding.
 - Designing and running crowd-sourced evaluations to measure the usability of machine translated sentences.
- PROFESSIONAL EXPERIENCE**
- Microsoft Research**, Intern Summer 2010
- Designed a model for cross-lingual relevance feedback that improves a machine-learned ranker for a resource-poor language by using feedback from a better ranker for a language that has more training resources.
- Google, Inc.**, Intern Summer 2009
- Implemented a novel indexing architecture to support efficient cross-lingual retrieval. Built a large-scale prototype for Arabic-English web search.
- Google, Inc.**, Intern Summer 2008
- Proposed and implemented a translation feature that launched on Google maps, enabling users to read cross-lingual local search results.
- Yahoo!, Inc.**, Intern 1/2006 - 8/2006
- Developed a prototype for Japanese-English cross-lingual image search.
 - Implemented a system for mining the web to find parallel, multilingual text.
- Stottler-Henke Associates, Inc.**, AI Software Engineer 1/2004 – 1/2006
- Lead software engineer for EarthTutor, an adaptive intelligent tutoring system for teaching high school students earth science.
 - Software engineer for a training program for the Navy helicopter interfaces. Met with clients to do knowledge elicitation. Managed summer interns.
- AWARDS**
- Best Paper Award, European Association for Machine Translation 2012.
Paul Michelman Award for Exemplary Service to the Computer Science Dept., 2010.
Computer Science Department Service Award, 2008, 2009, 2010.
National Science Foundation Graduate Research Fellowship, 2006.
Intel Women in Science and Engineering Scholarship, 2000 – 2003.

SELECTED
PUBLICATIONS

Kristen Parton, Nizar Habash, Kathleen McKeown, Gonzalo Iglesias and Adriá de Gispert. **Can Automatic Post-Editing Make MT More Meaningful?** EAMT 2012. Best Paper Award.

Kristen Parton, Nizar Habash and Kathleen McKeown. **Lost and Found in Translation: The Impact of Machine Translated Results on Translingual Information Retrieval.** AMTA 2012.

Kristen Parton, Joel Tetreault, Nitin Madnani and Martin Chodorow. **E-rating Machine Translation.** WMT 2011.

Kristen Parton and Kathleen McKeown. **MT Error Detection for Cross-Lingual Question Answering.** COLING 2010.

Kristen Parton, Weiyun Ma, Kathleen McKeown and James Allan. **Using Query Time Information to Improve Multilingual Search and Response Generation.** In Handbook of Natural Language Processing and Machine Translation: DARPA GALE. Joseph Olive (ed.). 2011.

Kristen Parton, Kathleen McKeown, James Allan and Enrique Henestroza. **Simultaneous Multilingual Search for Translingual Information Retrieval.** CIKM 2008.

SKILLS

Programming: Java, C/C++, Perl, JavaScript; MapReduce.

Languages: Intermediate Spanish, French, Russian; beginning Arabic (2 years).