Manaal Faruqui

CONTACT INFORMATION	Language Technologies Institute School of Computer Science Carnegie Mellon University GHC 5709 *E-mail:* `mfaruqui@cs.cmu.edu` Pittsburgh, PA 15213, USA *WWW:* `http://cs.cmu.edu/~mfaruqui`

RESEARCH INTERESTS

Representation learning, lexical and distributional semantics, multilingual learning, semi-supervised learning, natural language processing and machine learning.

EDUCATION

Carnegie Mellon University, Pittsburgh, PA, USA

Ph.D., Language and Information Technology, 2012 - 2016*(expected)*

- Research area: Representation learning, Distributional semantics, Multilingual learning.
- Advisor: Prof. Chris Dyer

Indian Institute of Technology, Kharagpur, India

B.Tech. (Hons.), Computer Science, May, 2012
M.Tech., Computer Science, May, 2012

HONORS AND AWARDS

- **Best Student Paper Award** at NAACL 2015
- Selected to attend Heidelberg Laureate Forum 2015
- Best Reviewer Award at NAACL 2015
- Best Presentation Award at LTI Students' Research Symposium 2012
- Microsoft Research India Travel Grant to attend ACL-2011
- DAAD Working Internship in Science & Engineering scholarship 2010
- MITACS Globalink Research Internship Grant 2009

INTERNSHIPS

Google Research, London, UK   **May – Aug, 2015**
Supervisor: Dr. Ryan McDonald
Multilingual Morpho-Syntactic Lexicon Generation

Google Research, New York, USA   **June – Aug, 2014**
Supervisor: Dr. Shankar Kumar
Multilingual Relation Extraction

Yahoo! labs, Bangalore, India   **May – July, 2011**
Supervisor: Dr. Narayan Bhamidipati
Personalized Advertisement Search

University of Stuttgart, Stuttgart, Germany   **May – July, 2010**
Supervisor: Prof. Sebastian Padó
German Named Entity Recognition, Textual Entailment

Simon Fraser University, Vancouver, Canada   **May – July, 2009**
Supervisor: Prof. Anoop Sarkar
Model Adaptation in Statistical Machine Translation

JOURNAL PUBLICATIONS

Morpho-syntactic Lexicon Generation Using Graph-based Semi-supervised Learning.
Manaal Faruqui, Ryan McDonald, and Radu Soricut.
Transactions of the ACL (TACL) 2016.

Morphological Inflection Generation Using Character Sequence to Sequence Learning.
Manaal Faruqui, Yulia Tsvetkov, Graham Neubig, and Chris Dyer.
Proceedings of NAACL 2016 (long).

Polyglot Neural Language Models: Case Study in Cross-Lingual Phonetic Representation Learning.
Tsvetkov, Sitaram, **Manaal Faruqui**, Lample, Littell, Mortensen, Black, Levin and Dyer.
Proceedings of NAACL 2016 (long).

Sparse Overcomplete Word Vector Representations.
Manaal Faruqui, Yulia Tsvetkov, Dani Yogatama, Chris Dyer, and Noah Smith.
Proceedings of ACL 2015 (long).

Non-distributional Word Vector Representations.
Manaal Faruqui and Chris Dyer.
Proceedings of ACL 2015 (short).

Retrofitting Word Vectors to Semantic Lexicons.
Manaal Faruqui, Jesse Dodge, Sujay Jauhar, Chris Dyer, Ed Hovy and Noah Smith.
Proceedings of NAACL 2015 (long). Best Student Paper Award.

Multilingual Open Relation Extraction Using Cross-lingual Projection.
Manaal Faruqui and Shankar Kumar.
Proceedings of NAACL 2015 (short).

Learning Word Representations with Hierarchical Sparse Coding.
Dani Yogatama, **Manaal Faruqui**, Chris Dyer and Noah Smith.
Proceedings of ICML 2015 (long).

Evaluation of Word Vector Representations by Subspace Alignment.
Yulia Tsvetkov, **Manaal Faruqui**, Wang Ling, Guillaume Lample and Chris Dyer.
Proceedings of EMNLP 2015 (short).

Improving Vector Space Word Representations Using Multilingual Correlation.
Manaal Faruqui and Chris Dyer.
Proceedings of EACL 2014 (long).

Community Evaluation and Exchange of Word Vectors at `wordvectors.org`
Manaal Faruqui and Chris Dyer.
Proceedings of ACL Demo Session 2014 (short).

Augmenting English Adjective Senses with Supersenses.
Yulia Tsvetkov, Nathan Schneider, Dirk Hovy, Archna Bhatia, **Manaal Faruqui** and Chris Dyer.
Proceedings of LREC 2014 (long).

An Information Theoretic Approach to Bilingual Word Clustering.
Manaal Faruqui and Chris Dyer.
Proceedings of ACL 2013 (short).

Towards a model of formal and informal address in English.
Manaal Faruqui and Sebastian Padó.
Proceedings of EACL 2012 (long).

Handling OOV words in Indian-language–English CLIR.
Parin Chheda, **Manaal Faruqui** and Pabitra Mitra.

Proceedings of ECIR 2012 (short).

"I thou thee, thou traitor": Predicting Formal vs. Informal Address in English Literature.
Manaal Faruqui and Sebastian Padó.
Proceedings of ACL 2011 (short).

Acquiring Positive Entailment Pairs Across Languages & Domains: A data analysis.
Manaal Faruqui and Sebastian Padó.
Proceedings of IWCS 2011 (long).

Training and Evaluating a German Named Entity Recognizer with Semantic Generalization.
Manaal Faruqui and Sebastian Padó.
Proceedings KONVENS 2010 (short).

WORKSHOP PUBLICATIONS	A Framework for (Under)specifying Dependency Syntax without Overloading Annotators. Nathan Schneider, Brendan O'Connor, Naomi Saphra, David Bamman, **Manaal Faruqui**, Jason Baldridge, Noah A. Smith and Chris Dyer. Proceedings of the Linguistic Annotation Workshop at ACL 2013. Identifying the L1 of non-native writers: the CMU-Haifa system. Yulia Tsvetkov, Naama Twitto, Nathan Schneider, Noam Ordan, **Manaal Faruqui**, Victor Chahuneau, Shuly Wintner and Chris Dyer. Proceedings of the Workshop on NLP for Building Educational Applications at NAACL 2013. Soundex-based Translation Correction in Urdu–English CLIR. **Manaal Faruqui**, Prasenjit Majumder and Sebastian Padó. Proceedings of Workshop on Cross Lingual Information Access at IJCNLP 2011.
TEACHING EXPERIENCE	Carnegie Mellon University *Teaching Assistant* **Spring, 2016** Instructors: Prof. Chris Dyer Machine Translation 11-731, Graduate level course Carnegie Mellon University *Teaching Assistant* **Spring, 2014** Instructors: Prof. Noah Smith & Prof. Chris Dyer Natural Language Processing 11-411, Undergraduate level course Carnegie Mellon University *Teaching Assistant* **Fall, 2014** Instructors: Prof. Noah Smith Advanced Natural Language Processing Seminar 11-713, Graduate level course

SERVICE	Workshop Organizer:
	    2016: Workshop on Multilingual and Cross-lingual Methods in NLP at NAACL
	
	Session Chair:
	    2014: Semantics and Discourse, EACL
	
	Journal Reviewing:
	    2016: Computational Linguistics, TALLIP
	
	Conference reviewing:

2016: NAACL, ACL, ICML, CoNLL, ICLR
2015: EMNLP, NAACL, *SEM
2014: ICML, ACL, EACL, CoNLL
2013: NAACL, CoNLL
2012: EACL

Departmental service:
    Moderator, LTI Open House Student Panel, 2015
    Member, LTI Colloquium Committee, 2013-14, 2014-15
    Moderator, LTI Open House Student Panel, 2014
    Member, LTI Open House Committee, 2014
    Member, LTI Students' Research Symposium Committee, 2014

TALKS

Invited Talks:
    08/15: Improving and Better Understanding Word Vectors. University of Stuttgart.
    08/15: Improving and Better Understanding Word Vectors. University College London.
    07/15: Improving and Better Understanding Word Vectors. University of Edinburgh.
    06/15: Improving and Better Understanding Word Vectors. University of Copenhagen.
    06/15: Improving and Better Understanding Word Vectors. Cambridge University.
    01/13: Machine Learning for NLP: An Introduction. VIT Chennai, India.

Conference Talks:
    07/15: Sparse Overcomplete Word Vector Representations. ACL in Beijing.
    06/15: Retrofitting Word Vectors to Semantic Lexicons. NAACL in Denver.
    04/14: Improving Word Vectors Using Multilingual Correlation. EACL in Gothenburg.
    08/13: An Information Theoretic Approach to Bilingual Word clustering. ACL in Sofia.

At CMU:
    10/15: Graph-based Models for Lexical Semantics. Machine Learning Lunch.
    03/14: Lexical Semantics. A lecture in the undergraduate NLP course (11-411).
    08/13: Multilinguality to the Rescue. LTI Students' Research Symposium.
    08/12: Towards a model of formal and informal address in English. LTI Students' Research Symposium. Won the Best Presentation Award.

LANGUAGES

C++, Python, Native speaker of Hindi, Proficient in English.