

## JOSEPH TURIAN

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## WORK EXPERIENCE

Post-doctoral research fellow October 2007–present  
Laboratoire d'Informatique des Systèmes Adaptatifs (LISA) in the Département d'Informatique et Recherche  
Opérationnelle (DIRO) of Université de Montréal, Montréal, Québec.

## EDUCATION

*Ph.D.*, Computer Science September 2007  
New York University, New York, NY.

*M.S.*, Computer Science May 2004  
New York University, New York, NY.

*A.B.*, Computer Science, Cum Laude in Concentration June 2001  
Harvard University, Cambridge, MA.

## REFEREED PUBLICATIONS

Joseph Turian, Lev Ratinov, and Yoshua Bengio (2010). “Word representations: A simple and general method for semi-supervised learning.” Association for Computational Linguistics (ACL), Uppsala, Sweden. (17% oral presentation acceptance rate)

James Bergstra, Olivier Breuleux, Frederic Bastien, Pascal Lamblin, Razvan Pascanu, Guillaume Desjardins, Joseph Turian, and Yoshua Bengio (2010). “Theano: a CPU and GPU Math Expression Compiler.” Proceedings of the Python for Scientific Computing Conference (SciPy).

Hugo Larochelle, Yoshua Bengio, and Joseph Turian (2010).  
*Tractable Multivariate Binary Density Estimation and the Restricted Boltzmann Forest*. Neural Computation 22, pp. 2285–2307.

Giuseppe Attardi, Felieci Dell'Orletta, Maria Simi, and Joseph Turian (2009).  
“Accurate Dependency Parsing with a Stacked Multilayer Perceptron.” Proceeding of EVALITA 2009.  
Our parser achieved the **best score** in both the Main and Pilot subtask.

Joseph Turian, Lev Ratinov, Yoshua Bengio, and Dan Roth (2009).  
“A preliminary evaluation of word representations for named-entity recognition.” NIPS Workshop on Grammar Induction, Representation of Language and Language Learning, Vancouver, BC.  
(30% oral presentation acceptance rate)

Joseph Turian, James Bergstra and Yoshua Bengio (2009). “Quadratic Features and Deep Architectures for

Chunking.” North American Chapter of the Association for Computational Linguistics - Human Language Technologies (NAACL HLT) 2009, Boulder, CO.  
(41% overall acceptance rate, 20% oral presentation acceptance rate)

Benjamin Wellington, Joseph Turian, and I. Dan Melamed (2009).  
“Towards Purely Discriminative Training for Tree-Structured Translation Models.” In: Cyril Goutte, Nicola Cancedda, Marc Dymetman, and George Foster. *Learning Machine Translation*. MIT Press. pp. 131–149.

Joseph Turian (2007).  
*Constituent Parsing by Classification*. Ph.D. thesis, New York University, New York, NY.  
Advisor: I. Dan Melamed.  
Committee: Michael Collins, Ralph Grishman, Mehryar Mohri, Satoshi Sekine.

Joseph Turian, Benjamin Wellington, and I. Dan Melamed (2007).  
“Scalable Discriminative Learning for Natural Language Parsing and Translation.” 20<sup>th</sup> Annual Conference on Neural Information Processing Systems (NIPS 19), Vancouver, BC.  
(25% overall acceptance rate, 7.6% oral presentation acceptance rate)

Benjamin Wellington, Joseph Turian, Chris Pike, and I. Dan Melamed (2006).  
“Scalable Purely-Discriminative Training for Word and Tree Transducers.” 7<sup>th</sup> Biennial Conference of the Association for Machine Translation in the Americas (AMTA-06), Boston, MA.  
(44% overall acceptance rate, 29% oral presentation acceptance rate)

Joseph Turian and I. Dan Melamed (2006).  
“Advances in Discriminative Parsing.” Conference of the International Committee on Computational Linguistics and the Association for Computational Linguistics (COLING/ACL), Sydney, Australia.  
(23% paper acceptance rate)

Joseph Turian and I. Dan Melamed (2006).  
“Computational Challenges in Parsing by Classification.” HLT-NAACL Workshop on Computationally Hard Problems and Joint Inference in Speech and Language Processing, New York, NY.

Joseph Turian and I. Dan Melamed (2005).  
“Constituent Parsing by Classification.” 9<sup>th</sup> International Workshop on Parsing Technologies (IWPT), Vancouver, BC.  
(40% acceptance rate)

Joseph Turian, Luke Shen, and I. Dan Melamed (2003).  
“Evaluation of Machine Translation and Its Evaluation.” MT Summit IX, New Orleans, LA.

I. Dan Melamed, Ryan Green, and Joseph Turian (2003).  
“Precision and Recall of Machine Translation.” HLT-NAACL 2003, Edmonton, AB.  
(51% short paper acceptance rate)

## OTHER PUBLICATIONS

Boosted decision trees (2006). <http://nlp.cs.nyu.edu/GenPar/>  
Machine learning module of GenPar, a freely available machine translation system.

Discriminative syntactic parser (2005, 2006). <http://nlp.cs.nyu.edu/parser/>  
Freely available parser for natural language text.

General Text Matcher (2003).  
Freely available machine translation evaluation software.

<http://nlp.cs.nyu.edu/GTM/>

### **SELECTED HONORS AND DISTINCTIONS**

Henry M. MacCracken Fellowship	2001–2006 academic years
8 <sup>th</sup> Place Team Standing ACM International Collegiate Programming Contest (ICPC) World Finals, The Netherlands.	April 1999
Finalist in the annual Westinghouse Science Talent Search	1996–1997 academic year
USA Computing Olympiad Team Member	1996