

## Maksim Tkachenko

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Contact Information      *Homepage:* [www.mtkachenko.info](http://www.mtkachenko.info)  
(please find my contact e-mail address there)

Education                      Singapore Management University, Singapore  
School of Information Systems,  
PhD Student, started in 2015  
Adviser: [Hady W. Lauw](#)

St. Petersburg State University, St. Petersburg, Russia  
Faculty of Mathematics and Mechanics,  
Software Engineering Department,  
Student (Specialist) 2006 - 2011,  
Thesis: "Named Entity Recognition Technique Based on Wikipedia"  
Adviser: [Boris Novikov](#)

- Publications
- [1] **Maksim Tkachenko**, Chong Cher Chia, and Hady W. Lauw. "Searching for the X-Factor: Exploring Corpus Subjectivity for Word Embeddings". In: ACL (2018).
  - [2] **Maksim Tkachenko** and Hady W. Lauw. "Comparative Relation Generative Model". In: *IEEE TKDE* 29.4 (2017).
  - [3] **Maksim Tkachenko** and Hady W. Lauw. "Plackett-Luce Regression Mixture Model for Heterogeneous Rankings". In: CIKM. 2016.
  - [4] **Maksim Tkachenko** and Hady W. Lauw. "A Convolution Kernel Approach to Identifying Comparisons in Text". In: ACL, 2015.
  - [5] **Maksim Tkachenko** and Hady W. Lauw. "Generative Modeling of Entity Comparisons in Text". In: *CIKM*. 2014.
  - [6] Rinat Gareev, **Maksim Tkachenko**, Valery Solovyev, Andrey Simanovsky, and Vladimir Ivanov. "Introducing Baselines for Russian Named Entity Recognition". In: *CICLing*. 2013.
  - [7] **Maksim Tkachenko** and Andrey Simanovsky. "Named Entity Recognition: Exploring Features". In: *KONVENS*. 2012.
  - [8] **Maksim Tkachenko** and Andrey Simanovsky. "Selecting Features for Domain-Independent Named Entity Recognition". In: *KONVENS*. 2012.
  - [9] **Maksim Tkachenko**, Alexander Ulanov, and Andrey Simanovsky. "Classifying Wikipedia Entities into Fine-Grained Classes". In: *ICDEW*. IEEE. 2011.
  - [10] **Maksim Tkachenko**, Alexander Ulanov, and Andrey Simanovsky. "Fine Grained Classification of Named Entities In Wikipedia". In: *HP Labs Technical Report* (2010).

Employment                      PhD Candidate at the moment, see Education.  
**[School of Information Systems - Singapore Management University](#)**, Singapore  
11/2013 - 07/2015  
Research Assistant  
Exploring the problems of comparative relation mining.  
Designed and implemented a generative graphical model of a comparative sentence.

**St. Petersburg State University**, Russia

07/2012 - 11/2013

Research Engineer

Joint project with HP Labs.

Developed named entity recognition systems for French, Dutch, German, Spanish, Estonian, Czech, Russian.

Developed an entity linking system for English.

Explored active learning strategies for named entity recognition.

**St. Petersburg State University**, Russia

11/2011 - 07/2012

Junior Researcher

Joint project with HP Labs.

Developed the state-of-art named entity recognition system for English.

Explored the use of word/phrase embeddings in tasks of text sequential labeling.

**HP Labs Russia**, St. Petersburg

11/2011 - 11/2013

Contingent Worker

Joint projects with St. Petersburg State University.

**HP Labs Russia**, St. Petersburg

12/2009 - 11/2011

Intern

Explored the problem of fine-grained classification of Wikipedia articles.

**Lanit-Tercom, Inc.**, R&D department, St. Petersburg, Russia

09/2009 - 12/2010

Software Developer

Designed and implemented a dictionary-based part-of-speech tagger and lemmatizer for the Russian language with context-based homonym resolution.

Extended Apache Lucene to allow the system specific queries.

Maintained the information retrieval engine of an opinion mining system.

**JetBrains**, MPS Team, St. Petersburg, Russia

2009 (summer)

Software Developer

Designed a unified shell script language and implemented its translator to `.sh/.cmd` in Meta Programming System (MPS).

Awards

- 2017-2018, Presidential Doctoral Fellow of Singapore Management University (SMU), recipients of this Fellowship are selected from the top 5% of PhD students across SMU.
- 2018-2019, Presidential Doctoral Fellow of SMU.

Grants

- Technology of Development Information Extraction Systems for the Russian Language, 2013-2015. (with V. Ivanov, F. Nikolaev, M. Sidikov, A. Simanovsky, R. Gareev, R. Yamilov and V. Solovyev). The project is supported by Russian Foundation for Basic Research.

Computer Skills

*Programming Languages:* Java, Python, F#, Shell Scripts, Scala, OCaml, C/C++, SQL, Octave;  
*Java Technologies:* Java Persistence API (JPA), Hibernate, Apache Lucene, Apache Hadoop, Apache UIMA, Stanford CoreNLP, OpenNLP, Jersey, Google Web Toolkit (GWT), Vaadin, Guava, XStream;  
*Other Technologies:* Mercurial SCM, Git, Subversion (SVN), MySQL, PostgreSQL, NLTK, L<sup>A</sup>T<sub>E</sub>X;

OS: Windows, Linux.

Academic  
Involvement

- External reviewer for DSAA 2017, PAKDD 2017, DSAA 2016, PAKDD 2015, CIKM 2014, ICDM 2014
- Ad-hoc reviewer for Transactions of the Association for Computational Linguistics (TACL), Language Resources and Evaluation Journal, Journal of the Association for Information Science and Technology (JASIST)
- PC member of Spring Colloquium for Young Researchers on Database and Information Systems (SYRCoDIS) 2014, Conference on Software Engineering and Information Management (SEIM) 2016, SEIM 2017
- Participant of the 12th Estonian Summer School on Computer and Systems Science, August 18-22, 2013, Estonia.
- Participant and local organizer of the joint RuSSIR/EDBT 2011 Summer School, Russia.

Online Courses

- 2011. Introduction to Artificial Intelligence by Sebastian Thrun and Peter Norvig. (97.6%).
- 2011. Machine Learning by Andrew Ng.

Projects

- Plackett-Luce Regression Mixture Model (PLRMM) (<https://bitbucket.org/sitfoxfly/plrmm/>)  
Library for finding preference groups within a population of rankers.
- Tree-SVM (<https://github.com/sitfoxfly/tree-svm/>)  
F# tool for optimizing SVM on tree data structures.
- simple-ml (<http://github.com/sitfoxfly/simple-ml/>)  
Java library of fast on-line classification algorithms (i.e. Linear Perceptron, Pegasos SVM, PA Perceptron, Avg. Perceptron).
- extern (<http://bitbucket.org/sitfoxfly/extern/>)  
Fast serialization protocol for Java objects.
- SentiVec (<https://senticvec.preferred.ai/>)  
A Sentiment-Infused Word Embedding.
- Venom (<https://venom.preferred.ai/>)  
Venom is an open source focused crawler.

Languages

Russian (native), English (fluent), French (basic), Singapore Sign Language (basic)