# **Tomasz Jurczyk**

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#### EDUCATION

#### Atlanta. GA

#### **Emory University**

#### PhD in Computer Science and Informatics (expected graduation: December 2017)

- Accepted PhD Thesis Proposal: Improving Question Answering by Bridging Linguistic Structures and Statistical Learning.
- Faculty Advisor: Dr. Jinho D. Choi.

#### Wroclaw, Poland

# Wroclaw University of Technology

- M.Sc. in Computer Science, Computer Systems And Networks Specialty.
- M.Sc. dissertation title: Analysis of network delay in streaming services for DSL access technologies.
- B.S. in Computer Science.
- Co-creator of the IBM department research group.
- Creator and administrator of the official forum of Computer Science students.

Yik Yak Inc.

#### EMPLOYMENT

### Software Engineer Intern

- Actively participated in development and research aspects of the Machine Intelligence team.
- Designed and developed a company-wide machine learning and natural language processing framework.
- Successfully created the pipeline for automatic sentiment analysis on political data during the 2016 presidential election.
- Engineered the state-of-the-art image caption system to help understand image content uploaded to the platform.

#### **Research Scientist**

# **Emory NLP Lab**

- Worked on machine reading comprehension and bAbI tasks.
- Presented a multi-field structural approach to tackle reading comprehension tasks as question answering.
- Implemented and applied a natural language processing and information retrieval based framework.

#### Software Engineer Intern

# **Emory University Center for**

# Language and Information Research

- Redesigned and redeveloped the engine of the Slave Voyages project.
- Developed an efficient database access optimization with indexing and searching techniques.
- Designed and deployed a search platform configuration for SOLr.

#### Software Engineer

# **Nokia Siemens Networks**

- Specified, designed and created build systems in make (GNU).
- Created maintenance scripts for building automation in Bash, Python and PERL.
- Configured and maintained Continuous Integration tools such as Jenkins and Subversion.

**Can't Stop Games** 

• Designed and implemented automated testing environments for developers.

#### Systems Administrator

- Administered GNU/Linux servers (Debian, Gentoo, CentOS) located worldwide.
- Installed, configured and maintained developer and production environments.
- Configured high performance WWW servers (Nginx, Lighttpd), Databases (MySQL Server + Cluster) and load balancers (HAProxy).
- Deployed main company product to South Korea Market.

#### January 2011 – July 2012

January 2010 – January 2011

Summers 2013, 2014

Fall 2006 – Spring 2011

Summer 2016

Summer 2015

Fall 2012 – present

#### **TEACHING EXPERIENCE**

# **Emory University**

- Teaching Assistant; course: CS171 Introduction to Computer Science II (Fall 2012, Spring 2013, Fall 2013).
- Instructor; course CS170 Introduction to Computer Science I (Spring 2014, Fall 2014).

### TECHNICAL EXPERIENCE

# Projects

- Reading Comprehension on the *Friends* TV show scripts (2016-2017). Ongoing project that consists of (1) the dataset preparation for reading comprehension and (2) developing an efficient and scalable machine learning and natural language processing approaches for this task. <a href="http://emorynlp.github.io/character-mining/">http://emorynlp.github.io/character-mining/</a>
- SelQA (2015-2016). Selection-based Question Answering framework for factoid question answering. Dataset publicly available: <a href="https://github.com/emorynlp/question-answering/tree/master/data/selqa">https://github.com/emorynlp/question-answering/tree/master/data/selqa</a>
- RealQA (2014). Android application with Django REST API server supporting real time question answering system. <u>http://ir.mathcs.emory.edu/projects/realqa/</u>
- Slave Voyages (2013-2014). Open source project, search engine/platform and web service for the Trans-Atlantic Slave Trade Database. <u>http://www.slavevoyages.org/</u>

# Languages and Technologies

- SpaCy, NLP4J, StanfordNLP, Natural Language Toolkit (NLTK), Elastic, Scikit-learn, Keras, Tensor Flow, Theano.
- Python, Java, C/C++, Django, LUA, Bash, Perl, make (GNU), Linux.

### **Publications**

- **Tomasz Jurczyk**, Amit Ajit Deshmane, Jinho D. Choi. *Analysis of Wikipedia-based Corpora for Question Answering*. Submitted to LREC'2017.
- **Tomasz Jurczyk**, Jinho D. Choi. *Cross-domain Document Retrieval: Matching between Conversational and Formal Writings*. In proceedings of the Building Linguistically Generalizable NLP Systems Workshop, BLGNLP 2017 (during EMNLP 2017), Copenhagen, Denmark, 2017.
- **Tomasz Jurczyk**, Michael Zhai, Jinho D. Choi. *SelQA A New Benchmark for Selection-based Question Answering*. In Proceedings of the 28th International Conference on Tools with Artificial Intelligence, ICTAI'16, San Jose, CA, 2016.
- **Tomasz Jurczyk**, Jinho D. Choi. *Multi-Field Structural Decomposition for Question Answering*. arXiv preprint arXiv:1604.00938 (2016).
- **Tomasz Jurczyk**, Jinho D. Choi. *Semantics-based Graph Approach to Complex Question-Answering*. In Proceedings of the NAACL Student Research Workshop, NAACL-SRW'15, Denver, CO, 2015
- Qiaoling Liu, **Tomasz Jurczyk**, Jinho D. Choi, and Eugene Agichtein. *Real-Time Community Question Answering: Exploring Content Recommendation and User Notification Strategies*. In Proceedings of the 2015 International Conference on Intelligent User Interfaces, IUI '15, ACM, New York, NY, 2015.