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Yugra State University, Russia

B.S., Applied Math, 2008-2012

Diploma cum laude. GPA: 4.9/5.0

Education

University of Southern California Los Angeles M.S., Computer Science, 2012–2014

Additional Education

University of California at Berkeley Summer Session Student, June – August 2011

- Practical Machine Learning (stat 132)
- Concepts of Statistics (stat 135)

Internships and Jobs

Software Development Engineer at A9.com (Amazon subsidiary), August 2014 – current Search Relevance Team

- Developed distributed data processing pipeline for query similarity.
- Developed high-performance web service for serving ML model (50k qps in peak).
- Working primarily with Hadoop, Spark, S3, Java, Pig, Python and Scala.

SDE Intern at A9.com, June 2013 - August 2013

Search Relevance Team

- Implemented several infrastructure improvements for Amazon Spelling.
- Integrated new spelling model into Search Suggestions pipeline.

Directed Research at USC Information Sciences Institute, September 2012 - May 2013 Computational Behavior Group – http://cbg.isi.edu

• Research and developing "Twitter local events detection and summarization system." based on analyzing geo-tagged tweets.

Implemented a number of tools for collecting, processing and visualizing Twitter data. Designed data storage for data-analytics and web API.

- Paper (ASE/IEEE): cbg.isi.edu/wp-content/uploads/publications/cbg115 paper.pdf
- Project: cbg.isi.edu/projects/gambit/

Research Programmer at USC Information Sciences Institute, October 2012 - May 2014 Natural Languages Group at USC/ISI - http://nlg.isi.edu

- Metaphor-ADP natural language understanding system based on Abductive reasoning. Implemented semantic parsing pipeline (text to first-order-logic form) for the Russian language. Paper: http://www.aclweb.org/anthology/W/W14/W14-2305.pdf Code: github.com/eovchinn/Metaphor-ADP
- Developed language-agnostic semantic relations extractor based on dependency parsing.
- Developed different dependency relations analysis and querying tools. (https://github.com/zaycev/mokujin)
- Developed various tools for searching metaphors based on source-target semantic relations. (https://github.com/zaycev/metaphor-search)

Computer Skills

- *S*pecialties:: Discriminative training, sequence learning, machine translation, language understanding, information extraction, parsing, distributed (Hadoop-based) machine learning, sentiment analysis.
- *P*rogramming: python, numpy, scipy, nltk, scikit-learn, tensor-flow, django, c/c++, stl, pthreads, boost scala, c#, java, java script, angular js.
- Software: linux, git, vim, postgresql, memcached, nginx.

Career and Research Interests

large scale data processing, nlp, language understanding, machine learning, information retrieval, artificial intelligence

My Course Projects at USC:

- **Directed Research in Machine Translation**. "Word-based neural machine translation." code: https://github.com/zaycev/nnsmt
- Advanced NLP. "IBM-3 Word Aligner Based on Linear Programming" paper: http://www.aclweb.org/anthology/J/J10/J10-3001.pdf
- NewSQL. "Slab Allocator for Memcached" code https://github.com/zaycev/memcached/tree/stonebraker35
- **Applied NLP**. "N7 Hate Speech Classifier" code: https://github.com/zaycev/n7