mihlushi@yandex.ru
MichaelSolotky

Michael Solotky

Moscow, Russia
+7-967-291-0866

Education

BSc in Applied Mathematics and Computer Science, IV year

- **Lomonosov Moscow State University** July 2018 - October 2018
  Faculty of Computational Mathematics and Cybernetics

Continuing with the Master's degree afterwards, expected graduation in 2021

Experience

- **Yandex** July 2018 - October 2018
  Software Engineering Intern
  - Several methods of probability smoothing and their modification in language models for Automatic Speech Recognition have been implemented
  - Experiments on quality measurement were carried out to find the best model of all
  - Implemented an optimal algorithm for constructing ngram language models in C++ using MapReduce, **which surpassed baseline by up to 5 times in wall time on checked datasets and slightly in quality**
  - Wrote a complete framework with set of operations available from CLI

Projects

- **BigARTM (C++ Boost/STL, Protobuf, Travis, AppVeyor)** January 2017 - present
  Open Source library for topic modelling
  github.com/bigartm/bigartm
  - Developed a tool for parallel calculation of pairwise word statistics such as frequency of mutual occurrence, PMI in text collections of unlimited size
    Wikipedia full text processing takes 6 hours on a laptop with quad core AMD A6

Other experience

- **Primality test (C++)**
  Implementation of Miller test for deterministic checking of large numbers for primality as part of the Kaspersky Lab information security course
  Wall time on prime numbers of length 100 is about 4 seconds
  github.com/MichaelSolotky/sandbox/tree/master/Cpp_old_tasks/Primality_tests
- **ML (NumPy, Scipy)**
  Implementation of various ML algorithms from scratch
  github.com/MichaelSolotky/sandbox/tree/master/ML

Technical Skills

- **Used at work**: C++, Python, C, Bash
- **Basic knowledge**: SQL, Assembly language
- **Technologies**: C++ Boost, CMake, Make, Protobuf, MapReduce, SciPy, Scikit-learn, NumPy, Pandas, Pytorch
- **Tools**: Git, Subversion, UNIX/Linux, Travis, AppVeyor, LaTeX