

Education

- 2012 – 2013 **Yandex School of Data Analysis.**
- 2009 – 2014 **Specialist (equivalent to MCs degree) in Mathematics and Mechanics, Moscow State University, Moscow, Russia, GPA – 5.0 / 5.**

Work experience

- Aug 2017 – **Yandex, Team Leader, Senior Software Engineer, Advertising Services, Group of Autobudget.**
now
 - o The main focus is on supporting and improving backend of automatic bidder for Yandex Direct.
 - o Introducing new ideas and algorithms to be implemented in automatic bidder.
 - o Managing an organized work of the team.
- Jul 2016 – **Yandex, Senior Software Engineer, Advertising Services, Group of Projects Management.**
Aug 2017
 - o Help in coordination of department-spread projects.
- Jun 2015 – **Yandex, Software Engineer, Advertising Services, Group of Projects Management.**
Jul 2016
 - o The main task was to support automatic advertisement bidder, available for Yandex Direct users.
 - o Managing related projects in other groups.
- Sep 2012 – **Yandex, Software Engineer, Advertising Services, Group of Algorithms of Fraud Detection.**
Jun 2015
 - o Developing new fraud traffic filtration algorithms.
 - o Developing automatic Anomalies Detection system, which is able to notify users on anomalies in advertisement traffic.
 - o Integrating Anomalies Detection system with Anomalies Analyzer system, that is, anomalies in advertisement traffic, which are found by Anomalies Detection system, are passed to be analyzed to Anomalies Analyzer service.
- Jul 2012 – **Yandex, Software Engineer Intern, Advertising Services.**
Sep 2012
 - o Developing of backend of eventually consistent consensus system.
 - o Developing of Anomalies Analyzer service, which helps to find the reasoning slice of anomalies in advertisement traffic.

Skills

- Programming languages **C++, Python, Perl, R, JavaScript (with JQuery), html, SQL – proficiency, Scala – intermediate.**
- ML tools **Pandas, NumPy, SciPy, scikit-learn, matplotlib, Apache Spark, Vowpal Wabbit, word2vec.**
- Other tools **linux, git, svn, deb packages, gdb, pdb, vim, flask, nginx, mongodb, mac os.**
- Languages **Russian (native), English (proficiency).**

Publications

- May 2015 **Journal of Mathematical Sciences, Extension of Endomorphisms of the Subsemigroup $GE_2 + (R)$ to Endomorphisms of $GE_2 + (R[x])$, Where R is a Partially-Ordered Commutative Ring Without Zero Divisors**, Volume 206, Issue 6, pp 711-733 <https://link.springer.com/article/10.1007%2Fs10958-015-2348-y>.
- September 2014 **Journal of Mathematical Sciences, Endomorphisms of the Semigroup $G_2(R)$ Over Partially Ordered Commutative Rings Without Zero Divisors and with $1/2$** , Volume 201, Issue 4, pp 534-551 <https://link.springer.com/article/10.1007/s10958-014-2010-0>.
- 2013 **Fundamental and Applicable Mathematics, Extension of endomorphisms of the semigroup $GE_2 + (R)$ to endomorphisms of $GE_2 + (R[x])$ for the lattice-ordered commutative ring R with a unit and without zero divisors.**, no. 4, pp 155-184 <http://www.ams.org/mathscinet-getitem?mr=3431839>.

Projects

- 2017 – now **RAST – a highly distributed database**, <https://github.com/olegtsts/RAST>, https://github.com/olegtsts/parallel_programming.
 - o Project is in the designing state.
 - o Involves methods of constructing fault-tolerant service.
 - o Includes:
 - high-level multithreading technique
 - exception-safe design techniques
 - safe memory release techniques
 - o See the example of code here: https://github.com/olegtsts/parallel_programming/blob/master/lock-free-queue-with-olegts-ref-counting.cpp

2015 – 2016 **Graph Analyzer Utility**, *Mentoring project in Higher School of Economics*, <https://github.com/ilyshnikova/graph-analyzer>.

- o Server-based program, which accepts time series points and detects anomalies on data series.
- o Works online with complexity $O(1)$ on point submission.
- o Includes human html interface for controlling algorithms, which work on time series.
- o Source code: <https://github.com/ilyshnikova/graph-analyzer>

Git repository: <https://github.com/olegtsts/>

Olympiads

2011 **International Mathematics Competition for University Students**, Prize winner (third prize).

2011 **Students Olympiad of Higher Algebra**, Prize winner (second prize).

2010 **Students Olympiad of Higher Algebra**, Prize winner (third prize).

Apr 2009 **All-Russian Olympiad of Mathematics**, Prize winner (second prize).

Apr 2009 **Moscow State Olympiad of Mathematics**, Prize winner (first prize).

Jul 2008, 2007, 2006 **Geometrical Olympiad in Honor of I.F.Sharygin**, Prize winner (first prize), three times.

Apr 2008 **All-Russian Olympiad of Mathematics**, Prize winner (first prize).

Mar 2008 **Moscow State Olympiad of Mathematics**, Prize winner (third prize).

Apr 2007 **All-Russian Olympiad of Mathematics**, Prize winner (second prize).

Apr 2006 **All-Russian Olympiad of Mathematics**, Prize winner (third prize).

Mar 2006 **Moscow State Olympiad of Mathematics**, Prize winner (second prize).