

KIRILL IGUMENSHCHEV

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Employment

Principal Data Scientist, *Lantern Credit, Newport Beach, CA* 2017-present
White-box machine learning researchs · Data pipeline automation · team building
Co-founder, *MADObjective, San Francisco* 2017-present
Sales and marketing insights and automation. UI · ML · product · Agile
Founder, *FlowerBid, San Francisco* 2017-present
Web marketplace for farming businesses in California
Data Scientist, *6sense, San Francisco* 2015-2017
prediction models, feature engineering, and data-pipeline monitoring/debugging tools for lead scoring · distributed scraping, ML-based categorization of web pages from weblogs · foreign-to-English translation on HIVE · distributed distance-based clustering
Lead Data Scientist, *Sentio, San Francisco* 2015-2017
natural language processing of earnings conference calls · trading indicators from website visits and web-search
Postdoc (Computational Chemistry), *University of California, Berkeley* 2012-2014
Mathematical and computational methodology for simulating quantum effects in previously unapproachable large systems by leveraging path-integrals and distributed C++ algorithms on 20,000 computers
Research Assistant, *Los Alamos National Laboratory* summers 2003, 2004, 2006
Research Assistant, *University of Rochester* 2002-2004, 2011-2012

Top Skills

Highly competent: numerical methods (ODE, MC integration, tree ensembles (random forest)) · C++ (generic programming, cache optimization, supercomputers)
Experienced: data structures and algorithms · python (pandas, sklearn) · SQL · MapReduce · web UI (reactjs) · data synopsis · data warehouse design · inferential statistics

Relevant Coursework

data science · statistics · machine learning · neural networks · lean launchpad start-up · probability · statistical physics · game theory · coaching and leadership · natural language processing

Personal Projects

Command line tool for statistical description <https://github.com/kirilligum/daccli>
Calculates descriptive statistics and approximate quantiles and a histogram in one-pass to minimize I/O. Outperforms similar tools. Tested on >100GB files. Profiled and optimized using Valgrind and CrayPat. [C++, streaming algorithms, optimization]
Modified extremely randomized trees (in progress) <https://github.com/kirilligum/turids>
Cache-optimized implementation of extremely randomized trees. [C++, cache-optimization, cache-oblivious]
Educational games recommendation platform
Founded and co-led a team of 8 people for a lean start-up class at HAAS Business School. Customer discovery with over 10 hypothesis-validation interviews a week. Established partnership with content providers and schools. Developed a WebApp prototype. [C++, HTML/CSS, Wt]

Education

PhD and MS (Chemistry), *University of Rochester, Rochester, NY* 2004-2011
BS (Physics), *University of Rochester, Rochester, NY* 2002-2004
Moscow Institute of Physics and Technology, Moscow, Russia 2000-2001

Publications

J. Chem. Phys. 138, 054104 (2013); Molecular Physics 110,837 (2012); Phys. Rev. E 84, 026616 (2011); Phys. Rev. B 71, 033201 (2005); J Chem Phys. 127, 114902 (2007)

Personal

endurance sports (cycled 200 miles in a day) · intellectual confidence mentorship · tango/salsa instructor · barefoot ice climbing · organized art events for 300+ people · mixed-martial arts (caught a laptop thief)