

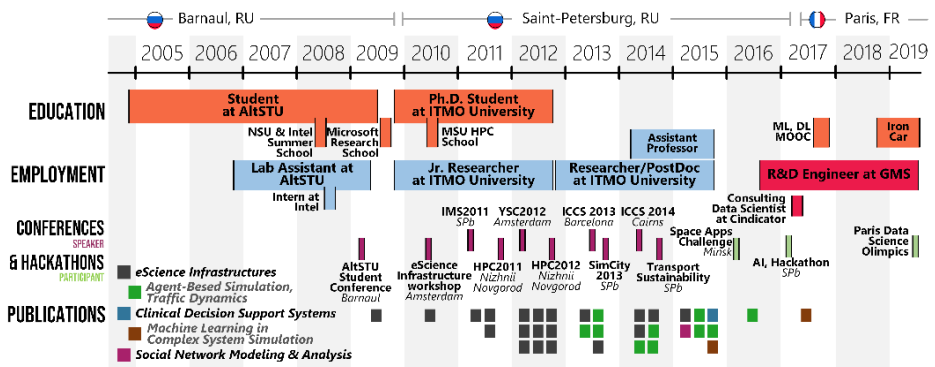
Konstantin KNYAZKOV

Paris, France

SUMMARY: Sr. R&D Engineer / Data Scientist with 9 years of professional experience: 6 years in academia, 2+ years of FinTech R&D. Holding a PhD degree in Computational Science (2012), I haven't lost a strong passion for research and new ideas generation. My professional interests lie in the domain of Data Science, AI, and ML. I am excited about a theme of hybrid intelligence and application of AI and evolutionary computing to engineering and design tasks. ■

AGE: 32 years old; **EDUCATION:** MSc, PhD in Computational Science; **LANGUAGES:** English (prof.), Russian (native), French (elem. A2)

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EMPLOYMENT

GLOBAL MARKET SOLUTIONS, R&D Paris, France

- R&D** Delivered (from the prototype to a product) a full-stack cloud-based solution for computation of xVA risk metrics for bank portfolios of derivative instruments. Played a key role within almost all infrastructural parts, e.g. a hybrid storage solution for financial market data, features: immutable data, collections versioning; workflow management;
- DS** Identification and calibration of a workflow performance model, modeling of simulation time which is needed for cloud computing infrastructure size estimation; developed a testbed for calibration of market data diffusion models;

GLOBAL MARKET SOLUTIONS, R&D Paris, France / St. Petersburg, Russia

- R&D** Design and development of an analytical web-application for risk management (prototypes, backend, frontend);
- DS** Built a machine learning pipeline; implemented the Bayesian learning model, built a gradient boosting model;

ITMO UNIVERSITY, ESCIENCE RESEARCH INSTITUTE, St. Petersburg

- R&D** Design and development of a distributed computing platform for computationally intensive tasks. Proposed the technology of *interactive workflows* before stream processing systems became widely used.
- R** Research studies in computational science, agent-based simulation, traffic simulation and human mobility modeling, evolutionary computation. Published more than 30 articles. Presented research findings at 6 international conferences/workshops. Supervised research of master students. Peer reviewer in several journals and conf. proceedings;
- DS** Established a collaboration with researchers from the Federal Almazov North-West Medical Research Centre on the early stage of clinical decision support system project; implemented the data acquisition infrastructure for electronic health records processing. Data analysis of an emergency transportation system of Saint-Petersburg based on the traffic data. Validation of ensemble-based water level forecasting model;
- T** Developed and taught lectures on: software systems' architectures; traffic simulation; scientific visualization; distributed eScience applications development; agent-based modeling and simulation;

FREELANCE, Barnaul, Russia

INTEL CORPORATION, Novosibirsk, Russia

ALTSTU, Barnaul, Russia

Senior Software Engineer

July 2017 – Present, 2Y
<http://www.globms.com>

Senior Software Engineer, remote job

Nov 2016 – July 2017, 6M
<http://www.globms.com>

Consulting Data Scientist

Mar 2017 – April 2017, 2M

Researcher, Assistant Professor

Sep 2009 – Sep 2015, 6Y
<http://en.escience.ifmo.ru>

Software Developer

2008, 2009

Intern / Software Engineer

Jul 2008 – Aug 2008, 2M

Computer Labs Assistant

Sep 2006 – Jun 2009, 3Y

EDUCATION

MSC, PHD ~BAC+8

ITMO UNIVERSITY, St. Petersburg

PhD in Computational Science

Sep 2009 – Sep 2012, 3Y

Thesis: "Composite applications development technology with the use of domain-specific program modules".

ALTAI STATE TECHNICAL UNIVERSITY (ALTSTU), Barnaul

MSc in Software Engineering

Sep 2004 – Jun 2009, 5Y

Diploma with honors; Thesis: "Technology and Framework for Distributed Systems Development based on the Active Object Concept".

ADDITIONAL EDUCATION AND TRAININGS

MOSCOW STATE UNIVERSITY (MSU), Moscow

Summer School on High Performance Computing

Summer 2010, 2W

MICROSOFT RESEARCH and MSU, Moscow

Summer School on HPC

Summer 2009, 2W

INTEL CORPORATION and NSU, Novosibirsk

Summer School on HPC

Summer 2008, 2M

PROJECTS AND HACKATHONS

IronCar Competition, Paris

Building a self-driving car. Role: head of team

Autumn 2018 – Present

NASA Space Apps Challenge, Minsk

Project received a Global Nomination. Role: analysis of satellite images.

April 2016

SKILLS

- DEV** .Net Core, C#, Python, Java, JavaScript, SQL, TypeScript, MongoDB, Protobuf, Apache Ignite, Apache Spark, Consul, Ansible, React, Redux, Docker, Flask, Powershell; *Passive (>3yrs not used):* C/C++, Erlang, Ruby, ZMQ, Django, MPI, OpenMP, TSQL;
- DS** IPython, Pandas, scikit-learn, keras, tensorflow, DVC, gnuplot, d3js, plotly.js; *Passive:* R, shiny. ■