



# Boris Shminke

Machine Learning  
Researcher/Engineer



16 June 1986



Nice, France



+33 788769442



<https://boris.shminke.com>



[boris@shminke.com](mailto:boris@shminke.com)

## About me

I'm an ML and big data professional with 10+ years of experience. I'm currently interested in applications of AI with a focus on reinforcement learning and graph-neural networks. I'm Russian with a French residence and work permit.

## Languages

English - full proficiency  
French - limited proficiency  
Russian - native

## Technologies

Machine Learning

- reinforcement learning (Ray)
- deep learning (PyTorch)
- recommender systems

Data Engineering

- Spark, Kafka, Hadoop, AirFlow
- Oracle, Teradata, SAS
- pandas

DevOps

- Docker
- CircleCI, AppVeyor
- Google Cloud Platform

Team work: git, Scrum, Kanban

Python: numpy, scipy, sklearn, Jupyter

Other DBs: PostgreSQL, Vertica, MongoDB

## education

Ph.D. (mathematics)	10.2020-09.2023
Université Côte d'Azur	
Thesis title: <i>Applications of AI to study of finite algebraic structures and automated theorem proving</i>	
Master equivalent (recognised by ENIC-NARIC) (applied maths)	09.2003-03.2009
Moscow Aviation Institute (National Research University)	
Thesis title: <i>Application of critical cases theory to stabilization problems with incomplete information</i>	

## experience

French National Centre for Scientific Research (CNRS)	10.2020-09.2023
PhD candidate	
developed a collection of OpenAI Gym environments for provers	
wrote a Python client to Isabelle proof assistant server	
automatically solved an open research question in abstract algebra	
created and taught Master courses on distributed big data and recommender systems	
Largest Russian bank (Sberbank)	11.2018-09.2020
team lead in the AI R&D unit	
built a financial news recommender for a mobile app with 40M users	
created and maintained a recommender systems library	
hired and supervised a team of ML Researcher Engineers	
Online cinema with 30M users (ivi.ru)	11.2015-10.2018
big data team lead	
applied model-based movie recommendations to improve CTR	
maintained the recommender serving over 1000 requests per sec.	
hired and supervised a team of ML Engineers	
One of the largest Russian learning platforms (netology.ru)	12.2017-07.2018
part-time instructor&content creator	
created and taught a course on recommender systems	
Top-30 Russian bank (TRUST)	09.2014-10.2015
senior risk analyst	
core developer at a consumer credit automation project	
Moscow office of an international consulting firm (Business & Decision, now part of Orange Group)	05.2014-09.2014
senior analyst for a project	
successfully implemented a cross-sell model data pipeline project	
supervised a team of Data Engineers	
Top-30 Russian banks (Binbank)	05.2013-05.2014
senior analyst	
created BI dashboards for consumer credit scoring	
Largest BI and Big Data Solutions provider in Russia (Glowbyte)	11.2010-04.2013
senior data engineer	
built a data pipeline for an anti-fraud model	
supervised a team of Data Engineers	
Leading Russian developer of IT solutions for air transport (IATVT)	08.2009-10.2010
programmer	
financial reports automation	
Russian ERP software developer (Comtec)	03.2009-08.2009
programmer	
full stack development for financial reporting	

## certificates

Oracle PL/SQL Developer Certified Associate	2015
SAS Certified Advanced Programmer	2014
Oracle Database SQL Certified Expert	2013
Certificate in Advanced English (Cambridge ESOL)	2012
SAS Certified Base Programmer for SAS 9	2011

## additional info

In addition to my daytime job, I've contributed code to Apache Spark and Ray RLLib, among other open-source projects. Apart from coding, I enjoy hiking.