



# Boris Shminke

Machine Learning Engineer

- 16 June 1986
- Toulouse, France
- +33 788769442
- <https://boris.shminke.com>
- boris@shminke.com

## About me

I'm an ML and big data professional with 15+ years of experience. I'm currently interested in applications of AI and cloud technologies in various domains. I'm Russian with a French residence and work permit ("passeport talent").

## Languages

English - full working proficiency  
French - professional working proficiency  
Russian - native

- ## Technologies
- Machine Learning
- LLMs (LangChain)
  - reinforcement learning (Ray)
  - recommender systems
- Data Engineering
- Spark, Kafka, Hadoop, AirFlow
  - Oracle, Teradata, SAS
  - pandas
- DevOps
- Terraform, Docker
  - GitLab CI, CircleCI
  - Azure, AWS
- Team work: git, Scrum, Kanban  
Python: pytorch, numpy, scipy, jupyter

## 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

Expleo France	since 11.2023
R&D Engineer	
infrastructure-as-code and backend for GenAI training assistant	
hierarchical data extraction from free text with LLMs	
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	
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	
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

Microsoft Certified: Azure Developer Associate	2025
AWS Certified Cloud Practitioner	2024
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 contribute code to open-source projects (Apache Spark and Ray RLLib among them) and do reviews for the Journal of Open Source Software. Apart from coding, I enjoy hiking.