

# OLEG KIRILLOV

**Objective: Senior / Lead ML Engineer & Architect**

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📍 Moscow, Russia 📅 08/08/1997



## EDUCATION



HSE University  
Faculty for Economic Sciences

**Applied Economics and Mathematical Methods**

📅 Sept 2015 – June 2019

📍 Moscow, 26 Shabolovka Str.

Cum laude. GPA: 8.89  
Bachelor of Science

## EMPLOYMENT EXPERIENCE



SBER Mass Personalization, NBA  
**Senior ML-engineer & Architect**

📅 March 2021 – ongoing

📍 Moscow, 31/2 Kutuzovsky Ave.

**Product: Model Execution Framework**

**Result:** Developed a distributed real-time data streaming infrastructure for online execution of ML models. Configured the interaction of Apache services (Kafka, Flink) and set up connection to Cassandra storage. Developed the whole python3 environment and controllers including ML algorithms (response modeling and offer deactivation procedure). Organized the deployment to OpenShift cluster using CI principles with the help of Jenkins pipelines.

**Product: Advanced uplift response model**

**Result:** Developed a new uplift response model for active channels based on transaction embeddings and real-time predictors. Improved the methodology of development sampling and target variable aggregation, feature selection and engineering. Finally, the new model demonstrated a significant increase

**Project: Business process management in RecSys**

**Result:** Developed and launched the new business process by extracting additional data on search interests and client risk profile from certain counterparties. Established the requirements, goals and a single backlog for developers and analysts. Finally, the new features based on the extracted data drove up the quality of NPV, risk and uplift models.



Moscow Metro  
**Senior Consultant (Data Science)**

📅 May 2020 – March 2021

📍 Moscow, 51/4c2 Schepkina Str.

**Product: Mobility as a Service**

**Result:** Developed the model of optimal pricing based on ML-algorithm forecasting and consumer choice mechanism determined from Monte Carlo simulations. The framework was driven by big data analysis (Spark MLlib) and specially designed consumer study, which implied homogeneous subgrouping, clusterization, and advanced hypothesis testing. Finally, determined the optimal hyperparameter set for the new product line.

## SOFTWARE SKILLS

🚀 **Model Deployment & Execution:**

OpenShift Jenkins Spark Streaming  
kafka Flink Git / BitBucket

📊 **Model Build & Insights (python3):**

Keras PyTorch xgboost lightGBM  
causalML Scikit-uptift numba  
pySpark Numpy Theano

🗄 **Database:**

HDFS Cassandra Greenplum  
ORACLE

⚙ **Additional:**

Linux C++ Bash Powershell

## TRAINING



**HARD ML by Karpov & Babushkin**  
matching tasks, dynamic pricing, uplift modeling, advanced A/B testing, deployment scenario

## COMPETITIONS



**Sanofi Health Guardians (2017)**  
#3 place winners / 1000+ participants in Business section



**Oliver Wyman Impact (2017)**  
Semi-finalist in Business section

## EDUCATION AWARDS



**#2 / 261 in Overall students rating**  
FES HSE, Fall semester (2018)



**#4 / 262 in Overall students rating**  
FES HSE, Spring semester (2018)

## LANGUAGE SKILLS

English (fluent) Russian (native)  
German (intermediate)

## EMPLOYMENT EXPERIENCE



Moscow Metro

Senior Consultant (Data Science)

May 2020 – March 2021

Moscow, 51/4c2 Schepkina Str.

**Project: Transport behavior research**

**Result:** Created and run certain models for time series forecasting (ARIMAX, VAR, BVAR). Combined various transport datasets using geolocation API, optimisation methods (e.g., FNN) and graph theory. Automated the process of data cleansing (outlier detection and seasonal adjustment). Finally, the estimates drove several contracts regarding the expansion of the company's products towards Russian regions.

## RESEARCH EXPERIENCE



HSE University,

Institute for Industrial and Market Studies

Researcher

March 2018 – Feb 2020

Moscow, 11 Pokrovsky Blvd.

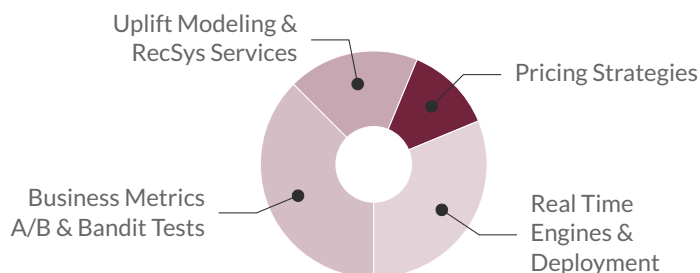
**Project: Collusion study: Empirical research and forecasting**

**Result:** Designed an empirical model to explore the determinants of systematic biases in court decisions. The model demonstrated high forecasting power on raw data. The predictors were lately used to evaluate the performance of the Antitrust Service in practice.

**Project: Unified database developing (Antitrust law violations)**

**Result:** Automatized the process of data collection by developing a parsing program on python. Tenfold reduced the time spent on manual data mining and minimized the errors.

## RESEARCH & INDUSTRY INTERESTS



## CHARITY & SOCIAL LIFE



HSE Moscow Marathon

Participant (2017, 2018)

## REFEREES

**Valeria Matyukhina**

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