# Valeriya Lakshina, PhD HSE

## **Associate Professor**

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The online version is available at

https://lakshinav.github.io/cv/

#### Residence

Nizhny Novgorod

Homepage

m hse.ru

**GitHub** 

!akshinav

**Email** 

<u> lakshinav@gmail.com</u>



Econometrician, big fan of data science. Earn PhD for the <u>research</u> on multivariate volatility models and their application for financial time series modelling.

## Professional development

## ML pipelines in production

HSE University and Sber

11.2020-12.2020

During this course I've build a ML pipeline on the basis of my Jupyter notebook.

The notebook is devoted to the time series prediction, namely the prediction of unemployment in Russia, and was used the student project at HSE University. The pipline is built in Kedro environment and includes:

- web-scraping step for collecting data (BeatifulSoap)
- building prediction (pandas, statsmodels)
- testing (hypothesis)
- serving the result by API (fastAPI, uvicorn)
- scheduling the pipeline tasks, e.g. web-scraping (airflow)
- CI/CD (Docker, Github Actions)
- · evaluating metrics

```
kedro fastAPI hypothesis CI/CD Docker
```

## Introduction to data-driven management

University of National Technology Initiative 2035

09.2020-10.2020

This online-course is supported by Russian Federal Project "Human Resources for the Digital Economy".

It's devoted to digital transformation of Russian economy and the role of CDO's.

CDO digital transformation

## Summer digital school: Data Science track

Sberbank Corporate University

07.2020-08.2020

Data Science track includes one-week crash-course and 7 additional courses.

The crash-course is devoted to in-depth training in data analysis, machine learning algorithms and introduction to neural networks,

including such applications as CV, NLP and recommerder systems.

The courses cover the following topics:

- \* Basics of Programming
- \* Basics of Solving Algorithmic Problems
- \* Basics of SQL
- \* Python for Data Analysis
- \* Machine Learning

# Student projects sk-learn

- Data preprocessing and analysis using the example of Istok LLC data (plotly/dash, follium, Yandex Geocode, SQLite)
- Improving unemployment forecast by Google Trends data (web-scraping, sktime, AutoML, plotly/dash)

### Research

Code for my research papers is here. For more information about my publications, please, see my homepage.

## Career insights

### 2020 - present

Associate Professor, Department of Mathematical Economics, HSE University.

Subjects taught: Econometrics I, Data Analysis and Economics and Finance, research seminar, student projects.

### 2016 - 2020

Senior Lecturer, Department of Mathematical Economics, HSE University.

Subjects taught: Econometrics I, Game Theory, Macroeconomics I, research seminar.

### 2013 - 2016

Lecturer, Department of Mathematical Economics, HSE University.

Subjects taught: Microeconomics I and Econometrics I.

#### 2012 - 2013

Teacher Assistant, Department of Mathematical Economics, HSE University.

Subjects taught: Microeconomics I.

#### 2009 - 2010

Research assistant, Laboratory of Quantitative Analysis and Economic Modeling, HSE University. Project "Models of Financial Economics and Their Estimation".