# Valeriya Lakshina

# PhD, Senior Engineer, Associate Professor

Last update: February 25, 2023

Up-to-date version of CV is available at

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



Hi, I'm a senior engineer at Huawei Research Institute, my research interests mainly lay in the field of neural network compression and acceleration.

# **Professional Experience**

Dec 2021 - Present

### Huawei Research Institute, Nizhny Novgorod, RU

Senior Engineer

Completed a project on neural network compresion and acceleration, mainly for CV architectures. Currently working on the next project in the same field and lead a team of 8 engineers and interns. The stack includes PyTorch, ONNX.

PyTorch | Model compression & acceleration | Computer vision

Sept 2012 - Present

## HSE University, Nizhny Novgorod, RU

Associate Professor

Got PhD in Moscow at HSE University with honors. The thesis is devoted to time series modelling, namely, spatial specifications of multivariate volatility models. The research results are published in Scopus/WoS indexed journals. The code for the key publications is available on <a href="GitHub">GitHub</a>.

Econometrics Statistics Microeconomics

# **Career insights**

#### 2021 - present

Senior Engineer, Huawei.

Stack: Python, PyTorch, ONNX, TVM.

#### 2020 - present

Associate Professor, Department of Mathematical Economics, HSE University.

Subjects taught: Econometrics, 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".

# Professional development ML pipelines in production

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 in the student project at HSE University. The pipeline 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



## Introduction to data-driven management

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

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

