# **EKATERINA MELIANOVA**

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#### **EDUCATION**

- **PhD**, Advanced Quantitative Methods, The University of Bristol, UK, 2021-2024 (expected)
  Thesis title: Health in All Policies Approach: a Comprehensive Modelling of Social Policies' Effect on Health and Health Inequalities
- MS, Applied Statistics with Network Analysis, Higher School of Economics, Moscow, 2018-2020, studied in English (summa cum laude)

Thesis title: "Applying Advanced Statistical Techniques to Real-World Problems: Two Cases"

- MA, Comparative Social Research, Higher School of Economics, Moscow, 2017-2019, studied in English (summa cum laude)
   Thesis title: "Social Network Types, Social Support, and Socio-Economic Status: Conditional Indirect Effect on Psychological Distress". The work took 1st place in the Student Research Paper Competition.
- BA, Sociology, Higher School of Economics, Moscow, 2013-2017, studied in Russian and English (summa cum laude)
   Thesis title: "The Study of the Relationship between Social, Cultural, Economic Capital, Individual Characteristics and Obesity among Russian Adults: Longitudinal Modelling of the Three-Level Data".
  - Honor Program, Higher School of Economics, Department of Sociology, Moscow, 2017.
     Honor group membership includes an enriched curriculum, extra courses taught in English, close interaction with international lecturers and honors program faculty, and annual summer school project activities, providing crucial skills for academic development of students.
  - 2013 2014 first place in student's rankings.

#### **WORK EXPERIENCE**

#### The World Bank

Consultant

April 2019 to July 2021

- Data analysis for a study investigating the association between the school learning environment and academic achievements of pupils in Russia (Structural Equations Modelling).
- Data analysis for a project aimed at the development of extracurricular education in Russia (spatial statistics, data envelopment analysis, Bayesian additive regression trees). Title: "Doing Extra-Curricular Education: Blending traditional and digital activities for equitable learning" (led by Suhas D. Parandekar, PhD, senior economist at the World Bank).
- Literature review and data analysis for a project aimed at estimating returns to education in Russia (Mincerian equations, instrumental variables analysis, mixed-effects modelling).

#### **International Laboratory for Applied Network Research**

**NRU HSE** 

Research assistant

July 2020 to July 2021

• Preparing a paper on the topic: "Ethnic Discrimination in Moscow: Hierarchical Modelling Based on Rental Advertisements".

Research assistant July 2019 to December 2019

• Obtaining network citations of publications in the field of Network Analysis, using the Web of Science database as an instrument of data collection; processing the data in R and Python by means of exploratory statistical techniques.

#### **Laboratory for Studies in Economic Sociology**

**NRU HSE** 

Project work analyst

September 2017 to December 2018

• Methodology development and generalised linear modelling for the project titled "Social Factors of the Counterparty Selection in Online Labor Marketplaces (Based on Big Data)".

#### **Institute for Social Policy, Centre for Longitudinal Studies**

NRU HSE

Research assistant

September 2016 to June 2017

• Writing a paper as part of the project titled "Monitoring of the Socioeconomic Behavior of Households and Social Problems of Childhood" (Three-level longitudinal modelling).

# **GFK Russia**

Research assistant

June 2013 to August 2013

Writing reports based on sociological surveys, creating presentations, translating documents from English into Russian.

## **TEACHING**

#### **Department of Sociology**

NRU HSE

Teaching assistant for the "Data Analysis in Sociology" course

April 2018 to June 2018

Assessing tests and exams of students, organizing consultations.

#### **Department of Sociology**

NRU HSE

Teaching assistant for the "Introduction to Sociology" course

September 2014 to June 2015

Assessing essays of students, creating and distributing preparation materials for the exam.

### AWARDS / SCHOLARSHIPS / STIPENDS

- Prize-winning place in "2021 Kaggle ML & DS Survey" competition on Kaggle (\$5,000).
   Comparison of skillsets possessed by master's students and early-career professionals with bachelors on Kaggle using multilevel modelling.
- 2nd place in "CDP Unlocking Climate Solutions" competition on Kaggle (\$25,000), 2020.

  Developing a methodology for computing key performance indicators for cities, efficiency estimation accounting for social equity issues, evaluation of cooperation between cities and corporations, assessment of transparency initiatives (Data Envelopment Analysis, Network Analysis based on association rules, Structural Topic Modelling).
- 2nd place in the COVID-19 Symptom Data Challenge held in partnership with Facebook Research, the Duke Margolis Center for Health Policy, the Delphi Group at Carnegie Mellon University, the Joint Program on Survey Methodology at the University of Maryland, and others (\$30,000), 2020.
  - Estimating the effectiveness of (1) non-pharmaceutical interventions and (2) social distancing behaviour of people in combating the coronavirus outbreak in different countries (Multilevel Vector Autoregression Modelling).
- 1st place in "DS4G: Environmental Insights Explorer" competition on Kaggle (\$10,000), 2020. Estimation of NO2 emission factors for power plants in Puerto Rico, exploiting satellite data and Spatial Panel Modelling.
- 2nd place in "2019 Kaggle ML & DS Survey" competition on Kaggle (\$8,000).

  Development of a novel way of dealing with multiple-choice questions with network analysis techniques. Presentation of several use cases of such an approach for skills-oriented questions in the online survey.
- Funding for the preparation of a paper for the Journal of Economic Sociology, 2018.
   General topic of the project: "Socioeconomic Consequences of Informal Employment in Online Labor Marketplaces".
- Winner of the X anniversary competition of student research works in sociology "Student of the Year", held by the Russian Public
  Opinion Research Center (VCIOM), 2017-2018. Scholarship for the preparation of a paper for the "Monitoring of Public Opinion"
  journal.
- Stipend of the "Monitoring of Public Opinion" journal, 2018.
- Stipend of the Oxford Russian Fund, 2017-2018.
- Increased State Stipend, 2017-2018.

#### **PUBLICATIONS**

- Shmis, T., Ustinova, M., Chugunov, D., **Melianova, E.**, Parandekar, S., Kruske, L. (2021). New Skills for New Century: Informing Regional Policy. World Bank, Washington, DC.
- Melianova, E., Parandekar, S., Patrinos, H., & Volgin, A. (2020). Returns to Education in the Russian Federation: Some New Estimates (The World Bank Policy Research Working Paper).
- Melianova, E., Parandekar, S., & Volgin, A. (2020). Returns to Education in the Russian Federation: Towards Evidence Based Decision Making with Fiscal and Private Returns to Education (The World Bank Policy Research Working Paper).
- Melianova, E., Parandekar, S., & Volgin, A. (2020). Returns to Education in the Russian Federation: Variation across regions and implications for policy development in priority regions (The World Bank Policy Research Working Paper).
- Strebkov, D., Shevchuk, A., Lukina, A., **Melianova, E.**, & Tyulyupo, A. (2019). Social Factors of Contractor Selection on Freelance Online Marketplace: Study of Contests Using "Big Data". Journal of Economic Sociology, 20(3), 25-65 (in Russian).
- Melianova, E., Lukina, A., Rogatyuk, A. (2017). Social Factors of the Counterparty Selection in Online Labor Marketplaces. In the abstracts digest of the forum "Science of the Future Science of the Youth" (pp. 154-155) (in Russian).

#### **PRESENTATIONS**

- XXI April International Academic Conference on Economic and Social Development, NRU HSE, 2020. Report: "Returns to Education in the Russian Federation: Variation across Regions"
- Grushinsky sociological conference: "Sociologist 2:0: the Transformation of the Profession", Financial University under the Government of the Russian Federation, 2018.
  - Report: "Opportunities and Problems of Working with Big Data: Study of Contests in Online Labor Marketplaces".
- X International student scientific and practical conference "Electronic business. Management of the Internet projects. Innovations", NRU HSE, 2018.
  - Report: "The Formula for the Success of a Freelancer: the Case of Contests in Online Labor Marketplaces".
- Scientific seminar of the NRU HSE Laboratory of Social and Economic Research, 2018.

  Report: "Opportunities and Problems of Working with Big Data: Study of Contests in Online Labor Marketplaces".
- III All-Russian Youth Scientific Forum "Science of the Future Science of the Youth", Nizhny Novgorod, 2017. Report: "Social Factors of the Counterparty Selection in Online Labor Marketplaces".
- III Contest of students' research works, NRU HSE, 2017.

Report: "Factors of the Counterparty Selection in Online Labor Marketplaces: Is There a Place for the Social?"

## **SUMMER SCHOOLS**

• Summer School of the International Laboratory for Applied Network Research, NRU HSE, August 2018. General topic of the school: applied data analysis using Python, including machine learning methods.

## **MOOC**

- Measuring Causal Effects In The Social Sciences, University of Copenhagen (Coursera).
- Understanding Your Data: Analytical Tools, University of Virginia (Coursera).
- A Crash Course in Causality: Inferring Causal Effects from Observational Data, University of Pennsylvania (Coursera).
- Survival Analysis in R for Public Health, Imperial College London (Coursera).

## **OTHER SKILLS**

Software R, Python, STATA, SAS, SPSS, Mplus, Lisrel, SQL, ŁTEX.

Languages English: advanced. Russian: native.