

**Full name:** Anastasia Motrenko  
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## Education

- since 2014** Phd Student at Moscow Institute of Physics and Technology (State University)  
Department of Applied Mathematics and Control Sciences  
supervised by Prof. Vadim Strijov
- 2012–2014** Student at Moscow Institute of Physics and Technology (State University)  
Department of Applied Mathematics and Control  
Bachelor’s and Master’s degrees under supervision of Prof. Vadim Strijov

## Employment

- since 2013** Junior researcher/Engineer at Dorodnicyn Computing Centre of RAS  
Participation in research projects, including:
- building prototypes, products, and systems for testing (Python or Matlab)
  - publication of scientific results
  - writing research and grant proposals
  - supervision of undergraduate students

## Research & Key publications

### • Sample size estimation in classification

[Eng] A. Aduenko, A. Motrenko, V. Strijov. Object selection in credit scoring using covariance matrix of parameters estimations // Submitted to *Annals of Operations Research* in 2016.

[Eng] A. Motrenko, V. Strijov, G.-W. Weber. Bayesian sample size estimation for logistic regression // *Journal of Computational and Applied Mathematics*, 2014, 255. 743-752.

Supported by RFBR 12-07-31095 (“Algorithms for generalized linear classification model selection for low-volume samples”, as the project leader), 14-07-31045 (“Developing and analysis of classification models for sample sets of small size supported”)

### • Intrinsic Plagiarism Detection

[Eng] M. Kuznetsov, A. Motrenko, R. Kuznetsova, and V. Strijov. A framework for intrinsic plagiarism detection and author diarization // *Notebook for PAN at CLEF 2016*.

[Rus] I. Molibog, A. Motrenko, V. Strijov. Dimensionality reduction for intrinsic plagiarism detection // Submitted to *Informatics and applications*, 2016. (И.О. Молибог, А.П. Мотренко, В.В. Стрижов. Методы снижения размерности в задаче обнаружения внутреннего плагиата // Подано в журнал *Информатика и её применения*.)

Supported by Antiplagiat.Research

### • Time series forecasting and classification

[Eng] A. Motrenko, K. Rudakov, V. Strijov. Combining endogenous and exogenous variables in a special case of non-parametric time series forecasting model // *Moscow University Computational Mathematics and Cybernetics*, 2016, Vol. 36, No. 2, 71-78.

[Eng] A. Motrenko, V. Strijov. Extracting fundamental periods to segment biomedical signals // *Journal of Biomedical and Health Informatics*, 2016, Vol. 20, No. 6, 1466 - 1476.

[Rus] A. Motrenko, V. Strijov Obtaining an aggregated forecast of railway freight transportation using Kullback–Leibler distance // *Informatics and applications*, 2014. Vol. 8, No. 2. 86-97. (Мотренко А. П., Стрижов В. В. Построение агрегированных прогнозов объемов железнодорожных грузоперевозок // *Информатика и её применения*)

Supported by RFBR together with Russian Railways 13-07-13139 (“Methods of mutual influence analysis for passenger and freight traffic at he Russian Railways”), and by the Ministry of Education and Science of the Russian Federation RFMEFI60414X0041.

## Scholarships

- **Presidential scholarship** for young researchers and postgraduate students, 2016–2018.
- **Scholarship for postgraduate studies at MIPT**, under the “Staff” framework of the 5-100 programm, 2015–2017.

## Extras

- participated in a research project “Function learning for information retrieval” during **summer internship** at Laboratory of Informatics, University Grenoble Alps under supervision of Prof. Eric Gaussier.
- **assistant chair** at EURO conferences in 2013 and 2012.
- **assistant editor** of the Machine Learning and Data Analysis journal (2013)

## Languages

Russian (native), English, basic French and Spanish.