

Professional Experience

- Jul 2021 – now **Lead Researcher at Music AI Team**
Huawei, Moscow, Russia
- Mar 2019 – Jan 2021 **Postdoctoral Research Fellow at Faculté de Médecine**
[Sorbonne University](#), Paris, France
- Sep 2015 – Feb 2019 **Doctoral Researcher in Statistical Machine Learning**
[SIERRA Team](#) & [INRIA](#), Paris, France
- Jan 2018 – Mar 2018 **Research Intern in Machine Learning**
[Sancare](#), Paris, France
- Jun 2017 – Aug 2017 **Research Visit**
[University of Edinburgh](#), Edinburgh, Scotland, UK
- Jul 2014 – Aug 2014 **Member of Visual Quality Group**
Samsung R&D, Moscow, Russia
- Jul 2013 – Sep 2013 **Junior Researcher**
[ADSC](#), Singapore

Education

- Oct 2016 – Dec 2019 **Ph.D. in Machine Learning**
[Ecole normale supérieure \(ENS d'Ulm\)](#), France
Thesis title: On Parameter Learning for Perturb-and-MAP Models
Guide: [F. Bach](#)
- Sep 2013 – Jun 2015 **MSc in Applied Mathematics and Informatics**
Department of Innovations and High Technologies, [Moscow Institute of Physics and Technology \(MIPT\)](#), Russia
- Sep 2013 – Jun 2014 **Yandex School of Data Analysis**
Department of Data Science, [Yandex School](#)
- Sep 2009 – Jun 2013 **BSc in Applied Mathematics and Physics**
Department of Control and Applied Mathematics, [Moscow Institute of Physics and Technology \(MIPT\)](#), Russia

Skills

- Coding Python, R, Matlab, C++
- Deep Learning Keras, TensorFlow
- Research Graphical Models, Optimization, Boostings, Reinforcement Learning, Deep Learning for Signal Processing
- Languages Russian: native, English: fluent, French: B1-B2

Publications

- 2021 **T. Shpakova**, N. Sokolovska. Probabilistic personalised cascade with abstention, [Pattern Recognition Letters](#)
- 2019 **T. Shpakova**, F. Bach, M. Davies. Hyper-parameter Learning for Sparse Structured Probabilistic Models, [International Conference on Acoustics, Speech, & Signal Processing \(ICASSP\)](#), Brighton, UK
- 2018 **T. Shpakova**, F. Bach, A. Osokin. Marginal Weighted Maximum Log-likelihood for Efficient Learning of Perturb-and-Map models, [Uncertainty in Artificial Intelligence \(UAI\)](#), Monterey, USA
- 2016 **T. Shpakova**, F. Bach. Parameter Learning for Log-supermodular Distributions, [Neural Information Processing Systems \(NIPS\)](#), Barcelona, Spain

Data Science Competition

- Oct 2020 **3rd place at McKinsey's Datathon**, *online*
Churn prediction problem
- Mar 2020 **10th out of 1000 participants at Kaggle WiDS Datathon**, *online*
ranking problem
- Nov 2019 **2d place at McKinsey's Datathon: The City Cup**, *Munich, Germany*
Solved a social challenge, related to natural disasters, by applying state-of-the-art data science and combining them with consulting skills
- May 2019 **20th out of 500 participants at Best Data Scientist Datathon**, *Paris&Berlin*
categorical problem
- Jan 2019 **Winner of the brainstorming session from Dior, Kaggle Days Paris**, *Paris, France*
Feature engineering for machine learning algorithms to analyze customers with one transaction
- Mar – Sep 2018 **Winner of WorldQuant International Quant Championship**, *Singapore*
A three-stage international competition in quantitative finance with over than 11000 teams representing more than 1000 universities in 80-plus countries
- Designed the sustainable trading strategies based on various sources of data (technical stock market data, fundamental data, sentiment analysis data etc)
 - Built a portfolio by creating the most effective combination of strategies

Extracurricular Experience

- Jul 2020 – Jan 2021 **Shared supervision – 2 students from NutriOmics lab**
- Sep 2019 – Dec 2019 **Python Teaching Assistant – Sorbonne University**, *Paris, France*
- 23 Jan 2019 **Invited speaker – Women in Machine Learning & Data Science (WiMLDS) in Paris**, *Criteo, Paris, France*
WiMLDS Meetup aims to inspire and educate, regardless of gender, and support women in the field