

## Education

- 2018–present **Ph.D. in Applied Mathematics, Inria Grenoble Rhône-Alpes & University Grenoble-Alpes, France**,  
*Supervisors: [Júlyan Arbel](#), [Jakob Verbeek](#).*  
Bayesian analysis of deep learning: methodology and theory
- 2017–2019 **Msc. in Applied Mathematics, Moscow Institute of Physics and Technology, Russia**.  
*Department of Control and Applied Mathematics.*  
GPA: 5.0/5.0 (8.7/10), ranking top – 10%
- 2017–2018 **Msc. in Industrial and Applied Mathematics, Grenoble Institute of Technology, France**.  
*École Ensimag.*  
GPA: 15.2/20, ranking top – 10%
- 2013–2017 **Bsc. in Applied Mathematics and Physics, Moscow Institute of Physics and Technology, Russia**.  
*Department of Control and Applied Mathematics, with honors.*  
GPA: 4.9/5.0 (8.7/10), ranking top – 10%

## Additional research experience

- November 2019–  
January 2020 **Research visit, Duke University**, under [David Dunson](#).  
Prior predictive distributions in Bayesian neural networks
- January–July 2018 **Internship, Inria Grenoble - Rhône-Alpes**, Mistis team, under [Júlyan Arbel](#), [Pablo Mesejo](#).  
Distributional properties of Bayesian neural networks
- September 2016–  
January 2017 **Research project, Moscow Institute of Physics and Technology**, under [Vadim Strijov](#).  
Multitask regression in time series forecasting, granted, published
- January–July 2016 **Research project, Moscow Institute of Physics and Technology**, under [Vadim Strijov](#).  
Multitask classification for ligand receptor bindings, granted, published

## Papers

### Publications

- 2020 **Vladimirova M.**, Girard S., Nguyen H., Arbel J. *Sub-Weibull distributions: generalizing sub-Gaussian and sub-Exponential properties to heavier-tailed distributions*, **Stat Journal**, 2020 (to appear), [\[arXiv\]](#).
- 2019 **Vladimirova M.**, Arbel J., Mesejo-Santiago, P. *Understanding priors in Bayesian neural networks at the unit level*, **International Conference on Machine Learning**, 2019, [\[arXiv\]](#).
- 2017 **Vladimirova M.**, Isachenko R., Strijov V. *Dimensionality reduction for time series decoding and forecasting problems*, **DesTech Proceedings**, 2018, [\[text\]](#).
- 2016 **Vladimirova M.**, Popova M. *Bagging of Neural Networks in Multitask Classification of Biological Activity for Nuclear Receptors* (in russian), **Journal of Machine Learning and Data Analysis**, 2(3):349–363, 2016.  
A model to predict whether the ligand binds to a specific nuclear receptor.

### Workshops

- 2018 **Vladimirova M.**, Arbel J., Mesejo-Santiago, P. *Bayesian neural networks become heavier-tailed with depth*, **NeurIPS Workshop on Bayesian Deep Learning**, 2018, [\[text\]](#).
- Vladimirova M.**, Arbel J., Mesejo-Santiago, P. *Bayesian neural network priors at the level of units*, **Advances in Approximate Bayesian Inference symposium**, co-located with NeurIPS conference, 2018, [\[text\]](#).

## Conferences and Seminars

- 18 August 2020 **SMILES: Online Summer School on Machine Learning**, Moscow, Russia, 20 min talk.
- 3–5 October 2019 **PAISS: AI Summer School**, Paris, France, poster.
- 4 July 2019 **Machine Learning Reading Group**, Grenoble, France, invited talk.
- 23–28 June 2019 **BNP'12 Conference**, Oxford, UK, poster with best poster award.

- 9-14 June 2019 **ICML'19 Conference**, Long Beach, USA, poster.
- 3-6 June 2019 **Science Week**, Grenoble, France, poster.
- 15-17 May 2019 **CASI'19 Conference**, Dublin, Ireland, contributed talk.
- 4-5 April 2019 **Statlearn'19 Workshop**, Grenoble, France, poster.
- 19-22 March 2019 **YES X: Understanding Deep Learning Workshop**, Eindhoven, Netherlands, contributed talk, [\[slides\]](#).
- 14 March 2019 **PhD Student Seminar**, Grenoble, France, invited talk.
- 22-26 October 2018 **Masterclass in Bayesian Statistics**, CIRM Marseille Luminy, France, research school.
- 8-12 October 2018 **12<sup>th</sup> Intelligent Data Processing Conference**, Gaeta, Italy, contributed talk.
- 21-26 November 2016 **59<sup>th</sup> MIPT Scientific Conference**, Moscow, Russia, contributed talk.
- 10-14 October 2016 **11<sup>th</sup> Intelligent Data Processing Conference**, Barcelona, Spain, contributed talk.

## Reviewing

### Journal

Statistics and Probability Letters

### Conference

International Conference on Learning Representations (ICLR) 2020

### Workshops

I Can't Believe It's Not Better (ICBINT) NeurIPS Workshop 2020

Bayesian Deep Learning (BDL) NeurIPS Workshop 2019

Symposium on Advances in Approximate Bayesian Inference (AABI) 2019

## Awards and Honors

- 2019 **CNRS Mobility Project Grant**, €1500.
- 2019 **IDEX Project Grant**, €3200.
- 2019 **BNP 2019 Best Poster Award**.
- 2019 **YES X: Understanding Deep Learning Workshop**, travel support.
- 2018 **Masterclass in Bayesian Statistics**, travel support.
- 2017-2018 **IDEX Master Scholarship**.
- 2016-2017 **High Government Academic Scholarship**, for scientific achievements.  
Distributed every semester among top-10% students (4-6 year) of the Russian university
- 2016-2017 **Russian Foundation for Basic Research Grant**.  
16-37-00488 Algorithms for constructing neural networks as a superposition of universal models
- 2014-2015 **Abramov Fund Scholarship**, for learning progress and achievements.  
Distributed every semester among top-10% students (1-3 year) of MIPT
- 2013 **2<sup>nd</sup> prize at MIPT Mathematics Olympiad**, **3<sup>rd</sup> prize at MIPT Physics Olympiad**.

## Skills

**Scientific:** Bayesian statistics, neural networks, optimization

**Computer:** Python (including data science, neural networks specific and optimization libraries), R, Matlab,  $\text{\LaTeX}$ , Transact-SQL

**Languages:** Russian (native), English (fluent), French (B2), German (A2)

## Activities

**Communication skills:** numerous science olympiads organiser, member of a student committee

**Music:** piano (music school diploma with honors), ukulele

**Sport:** darts (MIPT team ex-member), soccer (MIPT women team ex-member), hiking, running, table tennis