# Ekaterina Antonenko

#### Education

since 2020 **École Polytechnique**, *PhD candidate*.

Data Science and Mining (DaSciM) team, Laboratoire d'informatique (LIX)

Scientific advisor: Jesse Read

2014–2016 British Higher School of Art & Design, 2D-animation.

2012–2014 Moscow Bioinformatics School.

2009–2014 Moscow State University, Diploma in Mathematics.

### Employment

since 2020 Data scientist, Digitalent (Paris, France).

2017–2019 Math instructor, Russian School of Mathematics (New York, USA).

2013–2016 Analyst, Moscow Center for Continuous Mathematical Education (Moscow, Russia).

### Preprints

- 1. E. Antonenko, A.Carreño, J. Read, *Missing Value Imputation with Multi-label Random Forests*
- 2. M. Konnova, E. Antonenko, J. Read, *Missing Value Imputation for Genomics Data using a Sequence Based Generative Adversarial Network*
- 3. E. Antonenko, M. Mechenich, R. Beigaite, I. Zliobaite, J. Read, *Probabilistic prediction* of land cover at the global scale: modeling absence of human activity

#### **Publications**

- 1. E. Antonenko, J. Read, *Chains of Autoreplicative Random Forests for missing value imputation in high-dimensional datasets*, [Best paper award], Multi-Label Learning workshop at the ECML conference, 2022, https://arxiv.org/abs/2301.00595/.
- 2. E. Antonenko, J. Read, *Multi-modal ensembles of regressor chains for multi-output prediction*, Advances in Intelligent Data Analysis XXI 21st International Symposium, IDA 2022, 2022.
- 3. V. Ivanenko, E. Antonenko, M. Gelfand, J. Yager, F. Ferrari, Changes in segmentation and setation along the anterior/posterior axis of the homonomous trunk limbs of a remipede (Crustacea, Arthropoda), PeerJ, 2016, https://peerj.com/articles/2305/.

## **Talks**

- 1. Chains of Autoreplicative Random Forests for missing value imputation in high-dimensional datasets, Multi-Label Learning workshop: current trends and open challenges, ECML PKDD 2022, Grenoble, France, September 2022.
- 2. *Multi-modal ensembles of regressor chains for multi-output prediction*, Intelligent Data Analysis XXI 21st International Symposium, IDA 2022, Rennes, France, April 2022.

## **Teaching**

- CSE204 Machine Learning (Bachelor Programme), Teaching assistant, Ecole Polytechnique, Spring 2023.
- CSE204 Machine Learning (Bachelor Programme), Teaching assistant, Ecole Polytechnique, Spring 2022.

## Additional training

- Data Science: Multiple Imputation in Practice, Utrecht University, The Netherlands, July 2022.
- Introduction to quantitative genetics, MIPT, Russia, Autumn 2021.
- Summer School on Machine Learning in Bioinformatics, *HSE University, Russia*, August 2020.

# Completed online-courses

- Al for Medicine Specialization, Deeplearning.ai, 2021, Certificate.
- Deep Learning Specialization, Deeplearning.ai, 2020, Certificate.
- Machine Learning, Stanford University, 2019, Certificate.
- Molecular Biology Part 3: RNA Processing and Translation, Massachusetts Institute of Technology, 2019, Certificate.
- Molecular Biology Part 2: Transcription and Transposition, *Massachusetts Institute of Technology*, 2019, *Certificate*.
- Molecular Biology Part 1: DNA Replication and Repair, Massachusetts Institute of Technology, 2018, Certificate.
- Quantitative Biology Workshop, Massachusetts Institute of Technology, 2018, Certificate.
- Introduction to Biology The Secret of Life, *Massachusetts Institute of Technology*, 2018, *Certificate*.
- Bioinformatics Algorithms (Part 1), University of California, San Diego, 2014, Certificate.

#### Additional skills

- Programming: Python, R, MatLab
- Languages: Russian (native), English (fluent), French (intermediate)