PAVEL MERINOV

Summary

PhD student in Recommender Systems. I have a solid background in math and professional R&D experience in Machine Learning. My research interests cover the following areas: (1) Recommender Systems, (2) Bayesian Modelling, (3) NLP.

Programming languages

- Python
- Matlab

Libraries

- Numpy
- Scipy
- Polars
- Cython
- Numba
- Pytorch
- · Scikit-learn
- LightGBM
- Stan
- Jax
- Cvxopt
- Matplotlib

Technologies

- Linux
- Git
- Docker
- TeX

Languages

English (B2), Italian (A1), Russian

PROFESSIONAL EXPERIENCE

Machine Learning Engineer @ Recommender Systems Group

IVI, an Online Video Streaming Service

Moscow, Russia Apr 2021 - Jul 2021

 Worked on understanding and learning content-to-content similarity function for movie recommendations

• Implemented new features for offline (data and models) and online (real-time user experience) parts of IVI recommendations engine

Researcher @ Machine Learning Group

Proprietary Trading Firm

Saint Petersburg, Russia Oct 2017 - Jul 2020

Conducted research on time series forecasting with semi-structured data and Tree/CNN/RNN models

- · Worked on machine learning pipelines (from data retrieval to model backtesting)
- Mentored junior researchers and interns

Junior Researcher @ Neuroscience Lab

Moscow, Russia

Institute for Information Transmission Problems (Academy of Science) Jan 2015 - Oct 2017

- Developed a signal processing library for EEG noise suppression
- Carried out experiments with OpenBCI brain-computer interface hardware

Junior Researcher @ NLP Group

Moscow, Russia

MIVAR Technology Startup at Research and Technology Center Poisk-IT Oct 2013 - Nov 2014

 $\hbox{$\bullet$ Designed rule-based architecture for Russian language processing module. Improved an aphoral resolution engine } \\$

EDUCATION

Ongoing PhD

Free University of Bozen-Bolzano

Bolzano, Italy Nov 2021 - Present

• Research in RecSys related to urban sustainability and algorithmic user-system interaction modelling. I develop counterfactual simulation protocols to evaluate in-offline the impact of recommendations on multistakeholder systems

MS, Applied Mathematics and Physics

Moscow Institute of Physics and Technology (Phystech)

Moscow, Russia Sep 2012 - Jun 2014

· Thesis: Scalarization and steepest descent methods in multicriteria optimization problems

BS, Applied Mathematics and Physics

Moscow, Russia

Moscow Institute of Physics and Technology (Phystech)

• Thesis: Estimation of sparse vectors

Sep 2008 - Jun 2012

SELECTED REFERENCES

[1] P. Merinov, F. Ricci.

Shaping Sustainable Tourist Experience: Simulating the Impact of Recommendation Salience (2025)

ACM Transactions on Recommender Systems

(https://doi.org/10.1145/3762816)

[2] P. Merinov, F. Ricci.

Positive-Sum Impact of Multistakeholder Recommender Systems for Urban Tourism Promotion and User Utility (2024)

RecSys '24: Proceedings of the 18th ACM Conference on Recommender Systems (https://dl.acm.org/doi/10.1145/3640457.3688173)

[3] P. Merinov.

Towards Sustainable Recommendations in Urban Tourism (2024)

RecSys '24: Proceedings of the 18th ACM Conference on Recommender Systems (https://dl.acm.org/doi/10.1145/3640457.3688016)

[4] P. Merinov, F. Ricci.

Simulating the Impact of Recommendation Salience on Tourists Experienced Utility (2024) RecSoGood 2024 Workshop, co-located with RecSys '24: 18th ACM Conference on Recommender Systems

(https://link.springer.com/chapter/10.1007/978-3-031-87654-7_4)

[5] P. Merinov.

Sustainability-Oriented Recommender Systems (2023)

Proceedings of the 31st ACM Conference on User Modeling, Adaptation and Personalization (https://dl.acm.org/doi/10.1145/3565472.3595617)

[6] P. Merinov, D. Massimo, and F. Ricci.

Behaviour-Aware Tourist Profiles Data Generation (2023)

13th Italian Information Retrieval Workshop (https://ceur-ws.org/Vol-3448/paper-08.pdf)

[7] P. Merinov, D. Massimo, and F. Ricci.

Sustainability Driven Recommender Systems (2022)

12th Italian Information Retrieval Workshop (https://ceur-ws.org/Vol-3177/paper22.pdf)