

Aleksandr “Sasha” Petrov

Recommender Systems Researcher with engineering background

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Residence: Permanent resident of the United Kingdom, Indefinite Leave to Remain holder

Key skills: Recommender systems, Search Engines Ranking, Personalised Online Advertisement

Languages: Russian - native, English - professional (C1/C2, IELTS 8.0), Spanish - pre-intermediate.

Education & Research

The University of Glasgow – *Ph. D. (recommender systems)*

10 2021 – now (expected graduation in 2025)

- My research is focused on scaling state-of-the-art sequential recommendation approaches to the large data sets, which are common in the real world.

Moscow State University – *Specialist (masters equivalent) (spam detection)*

09 2006 – 09 2011

- Thesis topic: “Multi-Profile Spam Detection System”, excellent grade.

Scientific Publications

[1] Petrov, A. and Macdonald, C., 2022, September. **A Systematic Review and Replicability Study of BERT4Rec for Sequential Recommendation**. In *Proceedings of the 16th ACM Conference on Recommender Systems* (pp. 436-447). <https://dl.acm.org/doi/10.1145/3523227.3548487>

[2] Petrov, A. and Macdonald, C., 2022, September. **Effective and Efficient Training for Sequential Recommendation using Recency Sampling**. In *Proceedings of the 16th ACM Conference on Recommender Systems* (pp. 436-447). <https://dl.acm.org/doi/10.1145/3523227.3546785>

[3] Petrov, A., Safilo, I., Tikhonovich, D., Ignatov, D., 2022, September. **MTS Kion Implicit Contextualised Sequential Dataset for Movie Recommendation**. Presented at *the ACM Conference on Recommender Systems - Workshop on Context-Aware Recommender Systems (RecSys CARS 22), Seattle, USA*.
<https://arxiv.org/abs/2209.00325>

[4] Petrov, A., Makarov, Y., 2021. **Attention-based neural re-ranking approach for next city in trip recommendations**. In *Proceedings of the ACM WSDM WebTour 2021*, (pp. 41-45).
http://ceur-ws.org/Vol-2855/challenge_short_6.pdf

[5] Charnine, M., Petrov, A. and Kuznetsov, I., 2013. **Association-Based Identification of Internet Users Interest**. In *Proceedings on the International Conference on Artificial Intelligence (ICAI)* (p. 1). The Steering Committee of The World Congress in Computer Science, Computer Engineering and Applied Computing (WorldComp).

[6] Sharnin, M.M., Petrov, A.V. and Kuznetsov, I.P., 2013. **Methodology for taking into account the interests of the user when working on the Internet based on his profile and associative links**. In *Proceedings of the XV All-Russian Scientific Conference RSDL' (Vol. 14, p. 86)*. (in russian language).

Work Experience

Amazon.com – *Sr. Software Engineer; Applied Science Intern*

09 2017 – 09 2021; 07 2022 - 10 2022

- Technically led various projects in recommender systems, search engines ranking, and personalised advertisement areas.
- Led a research project on identifying brand competitors based on user behaviour.

E-Contenta – CTO

08 2013 (full time from 03 2016) – 08 2017

I was a Co-Founder of the startup. I worked there part-time from 2013 and full-time from 2016.

- Built a white-label recommender system for media companies (video-on-demand platforms, music streaming, news companies).

Data-Centric Alliance– Head of R&D

10 2013 – 02 2016

- Built a number of algorithms for internet users market segmentation.

Tinkoff Digital– Data Platform Team Leader

10 2012 – 10 2013

- Built a platform for customer segmentation.

Mail.Ru group – Research Engineer

04 2012 – 10 2012

- Developed a “car enthusiasts” segment detection method for advertising targeting.

Yandex – Software Development Engineer

09 2009 - 04 2012

- Participated in the re-launch of the car traffic monitoring system.

Other activities

Created an online course “Applied Machine Learning”.

<https://skillfactory.ru/ml-programma-machine-learning-online>, Russian Language. Successfully educated around 500 students.

Developed the first module of “Big Data Specialist” offline course. <https://newprolab.com/ru/bigdata/>, Russian Language. The program is data engineering focused, first launched in 2015 and was launched 10 times so far.

Supervised Master’s students in the University of Edinburgh in 2018 - 2020. All student projects are about applying deep neural networks to recommend system problems.

Coached High School students in programming contests in 2007-2011. The students got awards in all-Russian programming competitions.