Alexey Lopatin

✉ apat1n@pm.me • ⌂ apat1n • in apat1n • k apat1n

Work experience

Aitube   **Machine Learning Engineer**
Astana, Kazakhstan   *Jul 2022 - Mar 2023*

○ Developed ETL pipelines for data processing using Airflow, Kafka and Postgres that deliver recommended items for **millions of users** every day
○ Implemented dynamic config service and mini-AB platform for fast evaluating multiple experiments with new models
○ Delivered to production a ranking model that improved CTR on the main page by $\approx 20\%$

VK   **Machine Learning Engineer**
St. Petersburg, Russia   *Oct 2020 - Jun 2022*

○ Added YouTube-8M based category classifier to video recommendation system as part of the ranking model
○ Implementation of graph model for user/item embeddings used as the candidates in recommendations
○ Completed R&D in the field of duplicate video filtering service on **hundreds of thousands of videos**

Yandex   **Intern Machine Learning Engineer**
St. Petersburg, Russia   *Feb 2020 - Jun 2020*

○ Improved quality metrics of recommendation system on films and series $\approx 3\%$
○ Added validation of data at the daily ETL pipeline, which prevents a decrease in recommendations quality
○ Made many AB experiments, e.g experiment of adding candidate generators from top makers, experiments of new series rankers with various hyperparameters and objective functions

Education

National Research University Higher School of Economics   **St.Petersburg, Russia**
B. Sc. in Applied Math and Computer Science   *2020–Present time*

Computer Science Center (**Yandex, JetBrains**)   **St.Petersburg, Russia**
Two-year additional education in Data Science & Software Engineering specialization   *2019–2021*

I have completed the following courses:
• Probability theory • Math statistics • Algorithms • Hadoop • Python
• Self-driving • Reinforcement Learning • NLP • Machine Learning • Java

National Research ITMO University   **St.Petersburg, Russia**
B. Sc. in Software Engineering   *2018–2020*

Relevant experience

Tinkoff Machine Learning 2-week project (repo)   **Research & Engineering**
Next point-of-interest recommendation task with geographic context (RecSys, Pytorch)   *2021*

Yandex ML Track (repo)   **Finalist**
Text classification for articles with the given title and content competition (Scikit-Learn, Catboost, Pytorch)   *2019*

Programming skills

Programming languages: Python • Java • C++ • Scala • SQL • Bash
Frameworks & Libraries: PyTorch / Keras • Catboost/XGBoost • Numpy/Pandas • Scikit-Learn • Flask/Django
Big Data: Hadoop • Spark • Kafka • Airflow • S3 • Cloud computing • ETL Proccessing
Databases: Postgres • Redis • SQLite • MongoDB
DevOps: K8S • Docker • Prometheus/Grafana • Heroku • CI/CD

Additional Info

○ I have teaching experience in the ML course (lectures and practice for a group of 20 students in the field of liberal arts)
○ I have lots of experience working in teams, enjoy working on non-trivial problems and am determined to learn new
○ Actively took part in programming contests, several times finished in the top 200 among 4000+ participants, have solved more than 1000 tasks on on Codeforces (one of the most popular competition platforms)