Pesnya Polina

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Education

MOSCOW INSTITUTE OF PHYSICS AND TECHNOLOGY

Dolgoprudny, Russia, 2018-2022
Applied Mathematics and Physics
GPA: 4.76/5.00
English: B1
Department of Control and Applied Mathematics
Basic department: Yandex data analysis

Skills

- **Programming skills:** Python, SQL, C/C++, TeX
- **Development tools:** Unix, vim, PostgreSQL, PyCharm, Jupyter Notebook, Microsoft SQL server, CLion, Google Colab, git, LaTeX, Yandex DataSphere
- **Data workflow:** PyTorch, Pandas, NumPy, MatPlotLib, Seaborn, Scikit-Learn

Experience

- Internship at Tinkoff (NLP, service automation team) in the field of NLP (from March 2022 to the June 2022)
- Internship at Sberbank (Treasury, Liquidity Risk Management Department) in the field of data science (from August 2021 to February 2022)
- Contributing to the creation of a machine learning tutorial (SDA): illustration, layout, markdown

Relevant Courses

- Reinforcement Learning, Yandex School of Data Analysis (Spring 2022)
- Self-Driving Cars, Yandex School of Data Analysis (Spring 2022)
- Recommendation systems, Yandex School of Data Analysis (Spring 2022)
- Natural Language Processing, Yandex School of Data Analysis (Autumn 2021)
- Deep vision and graphics, Yandex School of Data Analysis (Autumn 2021)
- Introduction to machine learning, Yandex School of Data Analysis (Spring 2021)
- Methods of modern and applied statistics, Yandex School of Data Analysis (Spring 2021)
- Python course, Yandex School of Data Analysis (Spring 2021)
- Database and SQL, semester course at MIPT (Autumn 2019)

Projects

- Work project on building a generative model of answers to client's questions - training of a generative model of responses based on GPT-2 and an informativeness classifier to assess the quality of generation.
- Graduate work forecasting seasonal demand of goods in retail - building a global model for predicting multiple time series.
- Yandex School of Data Analysis (SDA):

- **Reinforcement Learning:** Deep Cross-Entropy Method, Value Iteration, MCTS
- **Self-Driving Cars:** particle filter, trajectory prediction, traffic planning, Behavior layer
- **Recommendation systems:** matrix factorization, neural network recommendations, ranking model
- **Natural Language Processing:** Machine translation with transformers, Text Classification, Style Transfer
- **Deep vision and graphics:** Segmentation, VAE, GAN, monodepth
- **Python course:** python interpreter in python, graph of calculations in the map-reduce paradigm, asynchronous telegram bot: cinemabot
- **Methods of modern and applied statistics:** sample normality testing, variance analysis, multiple choice hypothesis testing
- **Introduction to machine learning:** lab work with competition on Kaggle: detection of diabetes within 5 years according to a preliminary study

- Writing queries, designing DBMS, creating tables, triggers, views, managing transactions and access
- Game “Akinator” based on a binary tree (C/C++ language).
- Optimization course project on Automatic Music Transcription

Awards

- Abramov scholar for high average score (2019-2021)
- Winner of First-level Olympiad in Physics - «Phystech» (2018)