

Pesnya Polina

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Education

MOSCOW INSTITUTE OF PHYSICS AND TECHNOLOGY

Dolgoprudny, Russia, 2018-2022

Applied Mathematics and Physics

GPA: 4.33/5.00

English: B1

Department of Control and Applied Mathematics

Basic department: Yandex data analysis

Skills

- **Programming skills:** Python, C/C++, SQL, TeX
- **Development tools:** PyCharm, Jupyter Notebook, CLion, Google Colab, git, LaTeX, Microsoft SQL server
- **Data workflow:** Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn

Experience

- Contributing to the creation of a machine learning tutorial (SDA): illustration, layout, markdown
- Assistant at the second stage of the Olympiad for schoolchildren of Phystech

Relevant Courses

- 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

- Yandex School of Data Analysis (SDA):
 - **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).
- Studying the article "Loss Surfaces, Mode Connectivity, and Fast Ensembling of DNNs" and the article "Snapshot Ensembles: Train 1, Get M for Free"
- 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)
- Prizewinner of MIPT «Phystech» Mathematics Olympiad (2018), Lomonosov Mathematics and Physics Olympiad (2018), Rosatom Mathematics and Physics Olimpiad (2018)
- Prizewinner of the regional stage of the All-Russian Olympiad of schoolchildren in mathematics physics (2017)