Shirin Alanova

Moscow, Russia
✆ +7 (916) 932 6755
shirin.alanova@gmail.com

Education

2019–2023   **National Research University Higher School of Economics**,
BS in Applied Mathematics and Computer Science, Faculty of Computer Science, Moscow
Relevant coursework:
- Programming in Python and C/C++
- Algorithms and data structures in Python and C/C++
- Math (Linear Algebra, Matrix Computations, Calculus, Discrete Mathematics, Probability Theory, Mathematical Statistics)
- Machine Learning and Introduction to Deep Learning

Work Experience

09/21–06/22   **National Research University Higher School of Economics**, Moscow, Russia
- Teaching Assistant in Probability Theory and Mathematical Statistics

Research Projects

2022   **Speech-based diagnostics of depression with machine learning**, Moscow, Russia
- Developed a Python script by using the package Librosa. It allowed to create a dataset from the extracted 52 audio features from interview recordings
- Investigated 6 Machine Learning algorithms for classifying depression stages. Found that Random Forest and KNN give the best values of the metrics F_1-score, AUC-ROC and specificity
- Researched the reason why the oversampling methods worked poorly for my task
- *Technologies: Python, Pandas, Sklearn, Librosa, Numpy*

2021   **Telegram bot for book recommendations**, Moscow, Russia
- Developed a Telegram bot by using telebot package. Added functionality of returning information about a book or author, creating a day selection of poems and quotes, recommending books by genre
- Implemented the project using API requests
- *Technologies: Python, Telebot package*

2021   **ECG-based heart disease detection system**, Moscow, Russia
- Researched efficient and convenient methods for extracting data from various wearable devices. Opted for Google Fit platform
- Implemented a Python script based on API requests that retrieved health data
- Devise a web service with Python and Flask framework that visualized all received data from different wearable devices
- *Technologies: Python, Flask framework*

Professional skills

Languages	Python, C/C++, Bash shell, Markdown, SQL
Technologies	Nympy, Pandas, Sklearn, PyTorch, Keras, Tensorflow
Environments	Jupyter, Colab, PyCharm, Clion

Achievements and awards

2019   **The 15th International Zhautykov Olympiad in mathematics**,
Almaty, Republic of Kazakhstan, participation

2019   **The 58th MIPT Physics and Mathematics Olympiad**,
Bishkek, Kyrgyz Republic, 2nd degree diploma

2019   **Phystech.International Olympiad in mathematics**,
Bishkek, Kyrgyz Republic, 2nd degree diploma

2018   **The 5th Iranian Geometry Olympiad**,
Bishkek, Kyrgyz Republic, honorable mention