

Министерство науки и высшего образования Российской Федерации

Федеральное государственное бюджетное образовательное учреждение

высшего образования

«Московский государственный технический университет имени Н.Э. Баумана

(национальный исследовательский университет)» (МГТУ им. Н.Э. Баумана)

ФАКУЛЬТЕТ

«Радиотехнический»

КАФЕДРА

ИУ-5 «Системы обработки информации и управления»

Лабораторная работа №1 по курсу

Технологии машинного обучения

Тема работы: "Разведочный анализ данных. Исследование и визуализация данных."

Выполнил: Группа:		Лисин А. В. РТ5-61Б
Дата выполнения:	« <u> </u> »	2021 г.
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Дата проверки:	« <u> </u> »	2021 г.
	Подпись:	

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Описание задания

Цель лабораторной работы: изучение различных методов визуализация данных.

Краткое описание. Построение основных графиков, входящих в этап разведочного анализа данных.

Задание:

- Выбрать набор данных (датасет).
- Создать ноутбук, который содержит следующие разделы:
- 1. Текстовое описание выбранного Вами набора данных.
- 2. Основные характеристики датасета.
- 3. Визуальное исследование датасета.
- 4. Информация о корреляции признаков.
- Сформировать отчет и разместить его в своем репозитории на github.

Ход выполнения работы

	1. Текстовое от в лабораторной работе и Имеются следующие дан	спользуется датас					
	 ISO код страны (iso_с Страна (country) Обновленные данны Данные за 2020-й год 	code) е за 2021-й год о н	` -	ast_updated)			
	5. Площадь страны (аге6. Плотность населения7. Рост населения (grow8. Процент населения с9. Номер по рейтингу (г	я на квадратный ки vth_rate) относительно мира		q_km)			
In [126	import pandas as pd import seaborn as sn import matplotlib.py %matplotlib inline sns.set(style="ticks"	rs plot as plt					
In [127	data = pd.read_csv('	2021_population					
In [128 Out[128 In [129	(229, 9)						
Out[129	iso_code country 2021_last_updated 2020_population area density_sq_km growth_rate world_%	object object object object object object object object					
In [130 Out[130	<pre>rank dtype: object data.isnull().sum()</pre>	int64 0					
	2021_last_updated 2020_population area density_sq_km growth_rate world_% rank dtype: int64	0 0 0 0 0 0					
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