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# PROSPECTS OF APPLYING DATA SCIENCE TO **EDUCATION IN THE CONDITIONS OF UZBEKISTAN**

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#### **Abstract**

This article examines the prospects of applying Data Science technologies in the field of education in the conditions of Uzbekistan. Issues such as necessary infrastructure, training of qualified personnel, data collection and management were discussed for the successful implementation of Data Science in the conditions of Uzbekistan. The measures presented in the article are expected to bring the educational system of Uzbekistan to a new level and help increase the country's competitiveness.

**Keywords:** Data Science, information analysis, individual teaching, education process optimization, online education, education quality, qualified personnel

# Introduction

Data Science, that is data science, current in the day different in the fields big importance occupation is doing This science is different information analysis to do and of them useful data get opportunity will give . Education Application of Data Science in the field study process optimization, individual training styles Create and education quality to increase help will give . Uzbekistan conditions Data Science in education application of reaching prospects about in detail discussion we do

### What is Data Science?

Data Science is different different information analysis to do through of them useful information get with the science involved. This is the process information assembly work, cleaning, analysis to do and the results visualization own into takes Data Science follows main of components consists of:

- 1.Data Collection: From various sources received information collect, collect and save
- 2.Data cleaning: Data correctness, right form, desired format and reliable to do for cleaning
- 3.Data analysis do : Data life , math and makes sense laws and regulations based on statistics and algorithmic methods using analysis do, re work
- 4. The results visualization: Above from processes received the results users that is, people who understands apparently to be for necessary in the form present to achieve

# **Application of Data Science in Education**

1. Students the results prophecy to do.

Using Data Science students the results prophecy to do can This is for teachers students which topics good that they are mastering or which in the fields to help needs that they are to determine help will give . An example for , machine study models through students exam the results prophecy to do and this based on individual training plans make up can



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# 2. Individual training.

Using Data Science each one to the student customized study styles Create can for this students study in the process activity, interests and successes analysis to do through individual training plans work exit can This is the method students study in the process more participation that it will and good to the results reach provides.

# 3. Education process optimization.

Using Data Science education process optimization can This is a lesson institutions resources efficient distribution of teachers the work schedule make up and study materials when updating help will give . An example for , data analysis through which textbooks more being used determination and that's it basically new textbooks preparation can

# 4. Online education platforms.

Online education platforms using Data Science students for suitable courses recommendation to do and their study process watching to go opportunity have These are platforms information analysis to do through students interests and needs determine, fit courses offer is enough

# 5. Education quality evaluation

Using Data Science education quality evaluation can This is the data through study institutions the results analysis to do and education quality to increase directed measures work exit enable will give . An example for , of students knowledge level evaluation through study programs improvement can.

# Uzbekistan in Data Science to education application reach

in Uzbekistan education system development for Data Science apply very important Not only that education quality increase , maybe education process more efficient to do opportunity will give . Data Science to education application reach for modern infrastructure necessary This is a computer laboratories , internet connection and information storage for servers requires existence . Uzbekistan education in the system this infrastructure Create for state and private sector cooperation important

in Data Science qualified personnel preparation very important For this purpose Uzbekistan universities in Data Science special courses and programs organize reach need Also foreign experts attraction to do and they are with experience sharing is also useful will be

# 1. Data collection and management.

Ours education in our system information hard work and manage for now complete to the road not placed . That's why for this too process present in the day important important have This process in full automation and of students study process , education results and another necessary information analysis to do for modern information collection and manage systems current reach need

### 2. Education programs improvement.

Using Data Science education programs improvement can for this Universities study programs efficiency evaluation and they are based on new , innovative programs work exit necessary All science programs and topics according to data models is taught and this models of students in science taking knowledge analysis in doing is used . This is a lesson process more efficient to do help will give and each one week , month, semester in the end analytical information get enable will give .

### 3. Independent education.

Uzbekistan education in the system of students independent education development for Data Science major important have. These are students for suitable coming, to master suffering



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sciences or topics Internet resources, books and online courses recommendation student's doing own achievement and disadvantages study process during observation and evaluation opportunity will give. High education in the system of students independent education in the organization education platforms through Data Science to apply not only education quality increases, perhaps of students independent research opportunities expands.

### **Summary**

Uzbekistan conditions Data Science in education application reach big to prospects have Not only that education quality increase , maybe education process more efficient to do opportunity will give . Using Data Science of students the results prophecy doing , individual training , education process optimization , online education platforms development and education quality evaluation can Uzbekistan education Data Science in the system successful application reach for modern infrastructure create , qualified personnel preparation , data collection and management , education programs improvement and online education development necessary These measures Uzbekistan education system new to stage take comes out and of the country competitiveness increases .

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