



First session exam (1st semester)
Year 2025/2026

Subject : **Specialty language**
Specialty : **Data Science**
Time : **2h**

Note : **100 pts**

Doctor : **Haifa Bahsoun**

THE ROLE OF A DATA SCIENTIST IN A WORLD OF EMERGING TECHNOLOGY

Data scientists harness the capabilities of big data and place it in the hands of those who can make strategic decisions. However, the role of a data scientist is different depending on the type of company you're working for.

What is emerging technology?

Emerging technology is any new technology with the potential to impact society or the business world significantly. This technology can include anything from social media to artificial intelligence.

As a data scientist, it's your job to keep up with these trends and help your company decide whether to adopt them. This action can involve everything from conducting research to developing prototypes*.

To become a data scientist, consider acquiring an Online Master's in Data Science. At the end of the program, you will be able to use quantitative and qualitative data analysis techniques.

Data scientists and emerging technologies

In today's fast-paced* business environment, it's more important than ever to be agile and adaptive in the face of a shifting landscape*.

Technology companies rely on data scientists to provide insights from their data and make the best decisions possible to grow their business. As technology evolves, so does the role of data scientists.

This change means those who want to stay competitive must continue their education and stay on top of new technologies. Read on to learn about various emerging technologies and the role data scientists play in each of them.

Artificial Intelligence (AI)

Artificial intelligence (AI) refers to the capability of machines and computers to perform tasks usually carried out by a human. A vital responsibility of a data scientist in these technologies is implementing predictive models using supervised or unsupervised machine learning techniques.

They train computers to do specific tasks or predict future events based on previous observations. These professionals analyze the data generated by AI systems, which can range from simple text messages to more complex images.

Data analysts also ensure the accuracy of artificial intelligence algorithms by comparing results against ground-truth* answers and adjusting parameters accordingly. They might also need to assess risk levels and identify ways to improve predictions such as false positives.

<https://www.computertechreviews.com> >

Vocabulary helper :

***prototype** : the original model of something from which later form are developed.

***fast-paced** : moving developing very quickly.

***landscape** : a format of printed matter or screen display that is wider than it is high.

***ground-truth** : it refers to the correct or true answer to a specific problem or question. It is a gold standard that can be used to compare and evaluate model results.

I. Comprehension Questions

Please read the text and answer the following questions : (25 pts)

1. On what is the role of data scientist depend ? (5 pts)
2. What can include the emerging technology ? (5 pts)
3. What should a data scientist be able to use at the end of the program ? (5 pts)
4. Why did technology companies rely on data scientists ? (5 pts)
5. What is the responsibility of a data scientist in « Artificial Intelligence » ? (5 pts)

II. Vocabulary

Spot from the text 5 words related to a data scientist. (10 pts)

III. Grammar

1. Find, in the text, 2 verbs in **simple present**. (5 pts)
2. Spot from the text 1 verb in **gerund form** and give his infinitive form. (5 pts)
3. Find, in the text, 1 model verb. (2.5 pts)
4. What is the most frequently used verb form in this text? (2.5 pts)

IV. Writing

In one paragraph, summarize the role of a data scientist in a world of emerging technology. (50 pts)

Good Luck !