

Reflection Activity 2.3

First, it should be mentioned that in general algorithms are very important and powerful tools, since they serve to prepare our heads as programmers and also allow us to face any type of problem in order to come up with an efficient and consistent solution. with the type of problem to be solved.

Since sorting can often reduce the complexity of a problem, it is an important algorithm in Computer Science. These algorithms have direct applications in searching algorithms, database algorithms, divide and conquer methods, data structure algorithms, and many more.

It is very important to learn the different types of sorting algorithms for problems of this nature because the quantity of information that we plan to sort is crucial and will define the kind of algorithm that will be the best in terms of efficiency.

The same applies for the searching algorithms, where the quantity of information and its order will define the type of algorithm that will fit the best to get an efficient and fast solution.

In the last few years, the searching algorithms have been very important because they help in solving AI problems and support other systems such as neural networks and production systems.

freeCodeCamp.org. (2020, January 18). *Sorting Algorithms Explained*. FreeCodeCamp.org; freeCodeCamp.org. [https://www.freecodecamp.org/news/sorting-algorithmsexplained/#:~:text=Why%20Sorting%20Algorithms%20are%20Important,structure %20algorithms%2C%20and%20many%20more](https://www.freecodecamp.org/news/sorting-algorithmsexplained/#:~:text=Why%20Sorting%20Algorithms%20are%20Important,structure%20algorithms%2C%20and%20many%20more).

Understanding Search Algorithms in AI. (2021). Engineering Education (EngEd) Program | Section; Understanding Search Algorithms in AI | Engineering Education (EngEd) Program | Section. <https://www.section.io/engineering-education/understandingsearch-algorithms-in-ai/#:~:text=learned%20the%20following%3A-,Search%20algorithms%20are%20algorithms%20that%20help%20in%20solving%20search%20problems,neural%20networks%20and%20production%20systems>.