The Space Complexity of KD-Tree = O(n)
Even when the dimensionality is small, O(log(n)) time complexity holds good only if our data is uniformly distributed in space. If the data is not uniformly distributed, the time complexity changes to O(n). (same as that of brute force KNN).

Note: When compared to the other models, KNN is often used as a baseline model, when we are operating with small data. KD-Tree is not developed to find the nearest neighbor in Machine Learning, but was developed to find the nearest neighbors in the computer graphics.

29.25 Extensions

Refer to the wikipedia article link given below, as this video lecture is purely theory based, and also the content in it was taught from the below mentioned link only.
Wikipedia Link: https://en.wikipedia.org/wiki/K-d_tree#See_also
For any queries regarding this topic, please feel free to post them in the comments section below the video lecture.