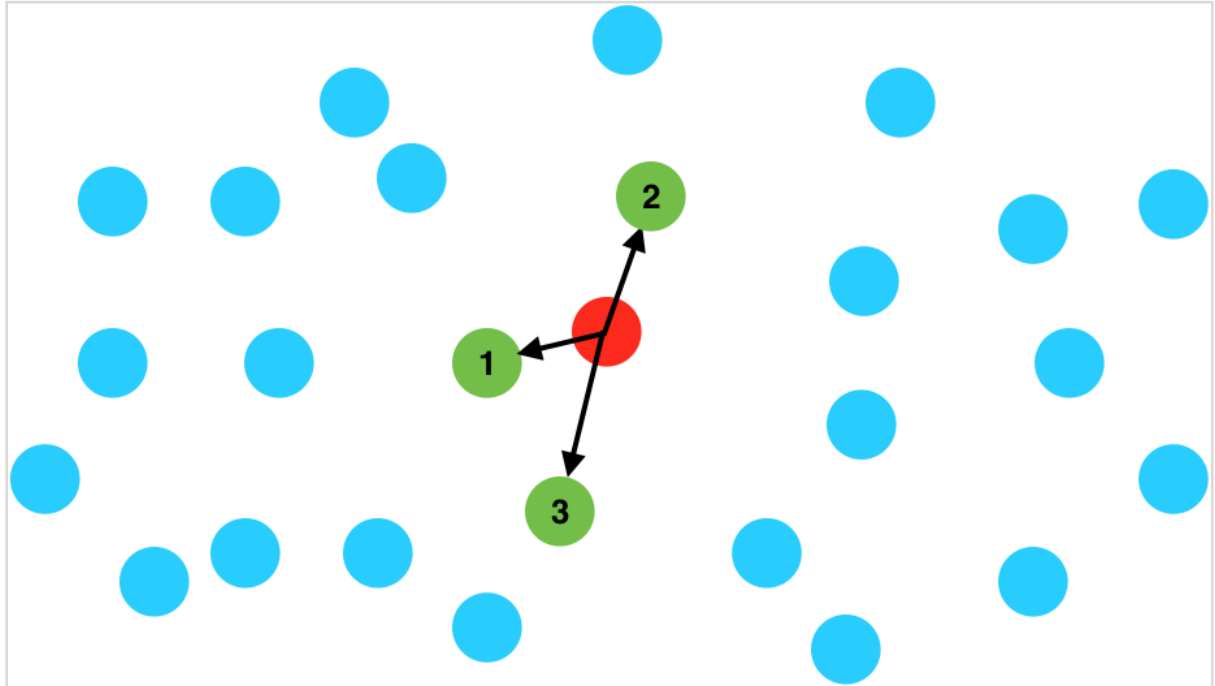


CS3102-Lecture-KNN

#utec/CS3102

K nearest neighbors



Given thousands of points, such as city locations, how do we retrieve the **closest points** to a given query point?

An intuitive way to do this is:

- Calculate the distances from the query point to every other point.
- Sort those points by distance.
- Return the first K items.

This is fine if we have a few hundred points. But if we have millions, these queries will be too slow to use in practice.