

Finding Neighbors

genetic formulation (not necessarily Euclidean distances)

distance map

$O(1)$

direct access!

\Rightarrow 2D navigation

where distance map = shortest distance

or initial cost function to path planning

then distance map for image graph!

BUT

IR cost constructing distance map

leads to

$O(n^2)$ to search path

this done in better

each cell \equiv distance from nearest point

point to nearest neighbor

KD-Trees

splitting might be not good \Rightarrow once we go to a branch of

the tree, there is not a way back to retrieve the best unless



n approximate neighbors... \Rightarrow KD-tree \Rightarrow heuristic (little splitting plane approx)

How is speed up location

What about SLAM

Mention Distance Maps