In addition to the practical benefits of these algorithms, it's also conceptually useful to learn about them because they deal with some of the same concepts that we will keep coming back to in this lesson. Those concepts include:

****Cost functions**** and how to include human insights (like "it's easier to make right turns than left turns") into our planning algorithms.

****Optimality**** and the tradeoffs associated with finding *the best* solution vs finding a solution that is *good enough*.

****Online vs Offline algorithms**** and how we can avoid complex computation on the road by precomputing best paths whenever possible.