# Lecture 18 

CSE 331
Mar 12, 2021

## Shortest Path Problem



# Another more important application 

## Is BGP a known acronym for you?



Routing uses shortest path algorithm

## Shortest Path problem

Input: Directed graph G=(V,E)
Edge lengths, $\mathrm{I}_{\mathrm{e}}$ for e in E

"start" vertex s in V


Output: Length of shortest paths from $s$ to all nodes in $\vee$

## Dijkstra's shortest path algorithm



