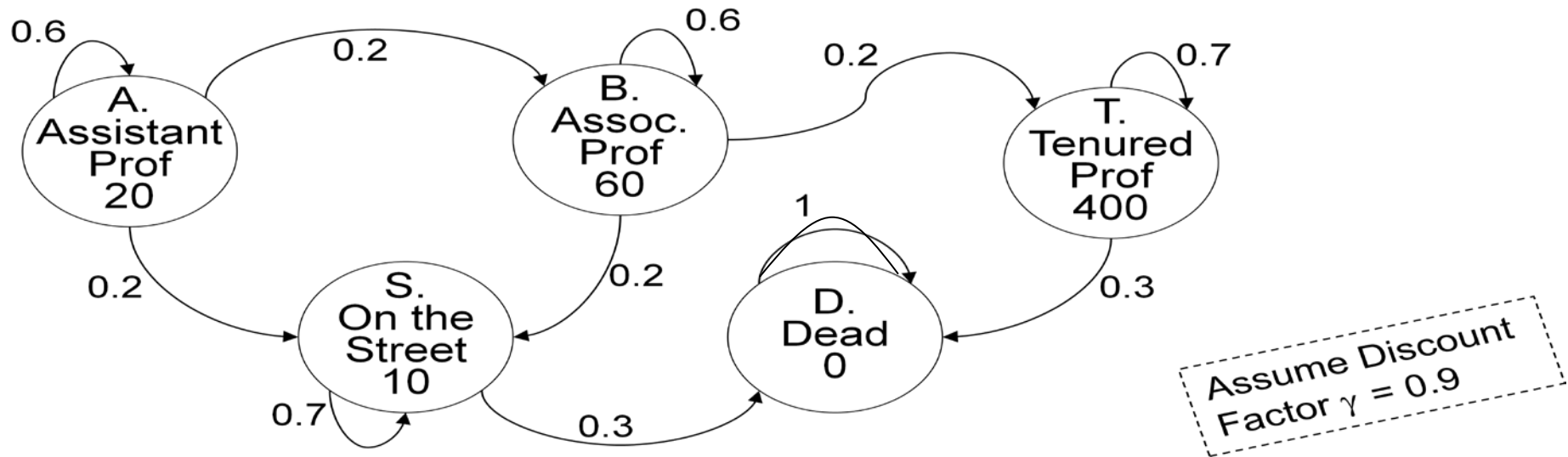


## Tutorial week 4

### Value iteration



### Questions:

- Write the reward vector,  $R$
- Write the transition probability matrix,  $P$
- Set  $\gamma = 0.9$ , fill the table on the next page
- Write an algorithm which computes the  $J$  values until  $k = 30$ .

k	$J_k(\text{Assist.Prof})$	$J_k(\text{Assoc.Prof})$	$J_k(\text{Tenured Prof})$	$J_k(\text{On the street})$	$J_k(\text{Dead})$
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

### Homework:

- Write a program which computes the J values until  $k = 30$ .
- Plot each J value with respect to k and describe the result.
- You can use any programming language or software for this task.