

Boyer-Moore: Putting it together

Use bad character or good suffix rule, *whichever skips more*


Step 1: T : G T T A T A G C **T** G A T C G C G G C G T A G C G G C G A A
 P : G **T** A G C G G C **G** bc: 6, gs: 0 *bad character*

Step 2: T : G T T A T A G C T G A T **C** **G C G** G C G T A G C G G C G A A
 P : G T A **G C** **G** **G C G** bc: 0, gs: 2 *good suffix*

Step 3: T : G T T A T A G C T G A T **C** **G C G G C G** T A G C G G C G A A
 P : **G** T A G C G G C G bc: 2, gs: 7 *good suffix*

Step 4: T : G T T A T A G C T G A T C G C G G C **G T A G C G G C G A A**
 P : G T A G C G G C G **G T A G C G G C G**

11 characters of *T* we ignored

Step 1: 
T: G T T A T A G C T G A T C G C G G C G T A G C G G C G A A
P: G T A G C G G C G

Step 2: *T*: G T T A T A G C T G A T C G C G G C G T A G C G G C G A A
P: G T A G C G G C G

Step 3: *T*: G T T A T A G C T G A T C G C G G C G T A G C G G C G A A
P: G T A G C G G C G

Step 4: *T*: G T T A T A G C T G A T C G C G G C G T A G C G G C G A A
P: G T A G C G G C G



Skipped 15 alignments

Boyer-Moore: Preprocessing

Pre-calculate skips. For bad character rule, $P = \text{TCGC}$:

		P			
		T	C	G	C
Σ	A	0	1	0	3
	C	0	-	2	-
	G	0	1	-	0
	T	-	0	1	2

T : A A T C A A T A G C
 P : T C G C