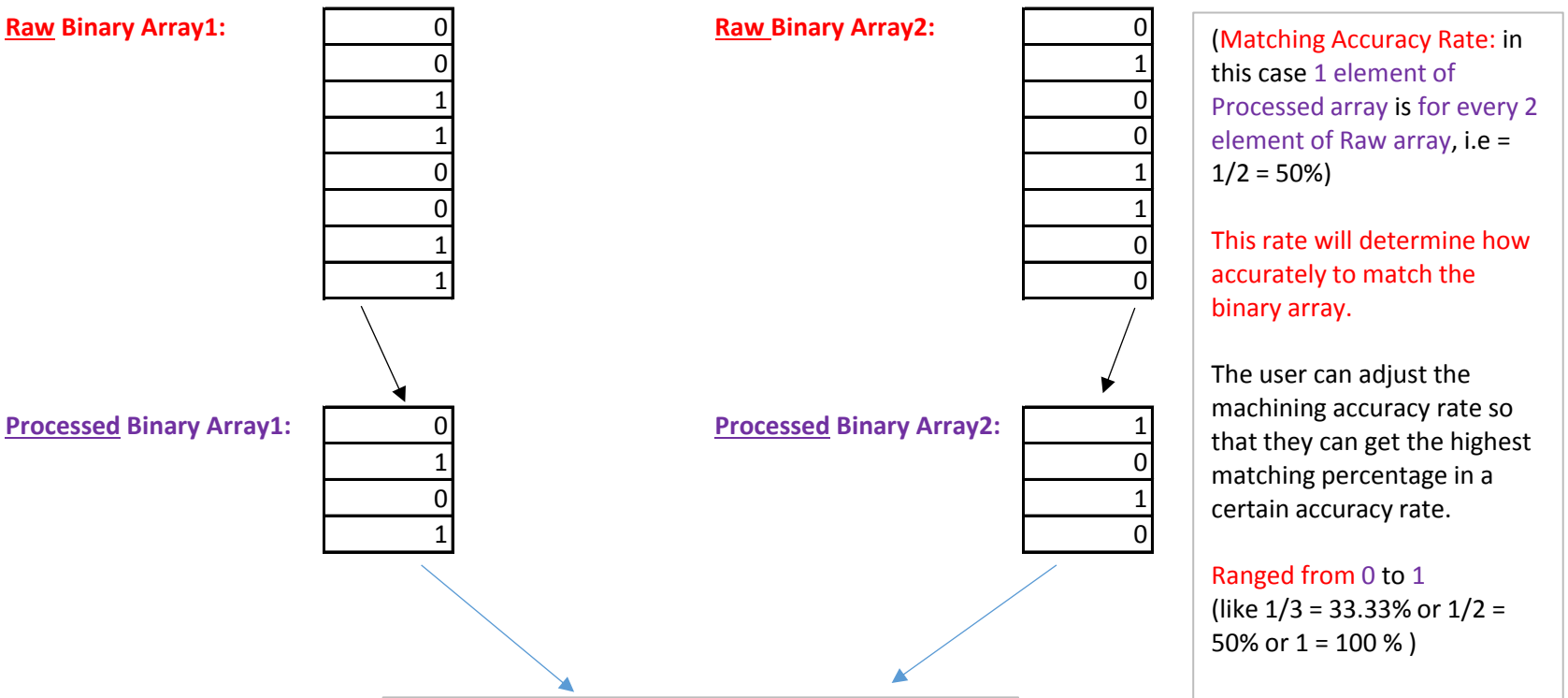
Project AMM (Advanced Matching Mechanism) by N Paul

the diagram:



(Matching Accuracy Rate: in this case 1 element of Processed array is for every 2 element of Raw array, i.e = 1/2 = 50%)

This rate will determine how accurately to match the binary array.

The user can adjust the machining accuracy rate so that they can get the highest matching percentage in a certain accuracy rate.

Ranged from 0 to 1
(like 1/3 = 33.33% or 1/2 = 50% or 1 = 100 %)

Matching Percentage.: This function will calculate the **percentage of similarity between** the elements of **two processed binary arrays**.

in this case
- is 0 match with 1 -> No
- is 1 match with 0 -> No
- is 0 match with 1 -> No
- is 1 match with 0 -> No

:. Matching Rate = 0 out of 4

:. In this case: We get Matching Percentage 0(%) , when the matching accuracy rate is 1/2 (i.e 50%)

(Similarly if the Matching Accuracy Rate was 25%) -->

Raw Binary Array1:

0
0
1
1
0
0
1
1

Raw Binary Array2:

0
1
0
0
1
1
0
0

(Matching Accuracy Rate: in this case 1 element of Processed array is for every 4 element of Raw array, i.e = 1/4 = 25%)

Processed Binary Array1:

1
1

Processed Binary Array2:

1
1

Matching Percentage.:

in this case
is 1 match with 1 -> Yes
is 1 match with 1 -> Yes

:. Matching Rate = 2 out of 2
:. Matching Percentage = 100%

:. In this case: We get Matching Percentage 100(%) , when the matching accuracy rate is 1/4 (i.e 25%)