

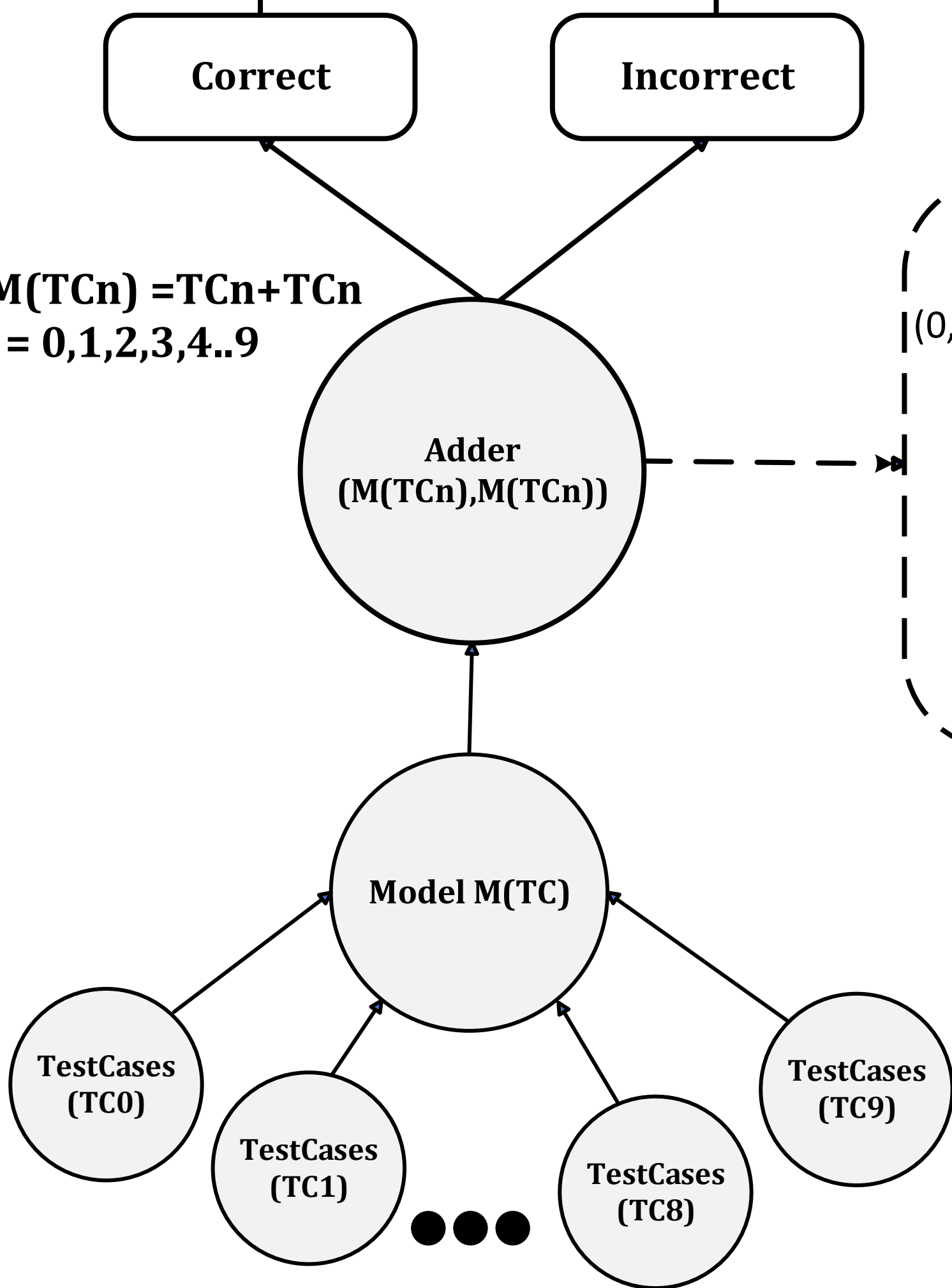
STAGE 2:
Global Robustness
(GR)

For example:
 $M(TC8) + M(TC1) = TC8 + TC1$
LR 80% + LR 90% = ???

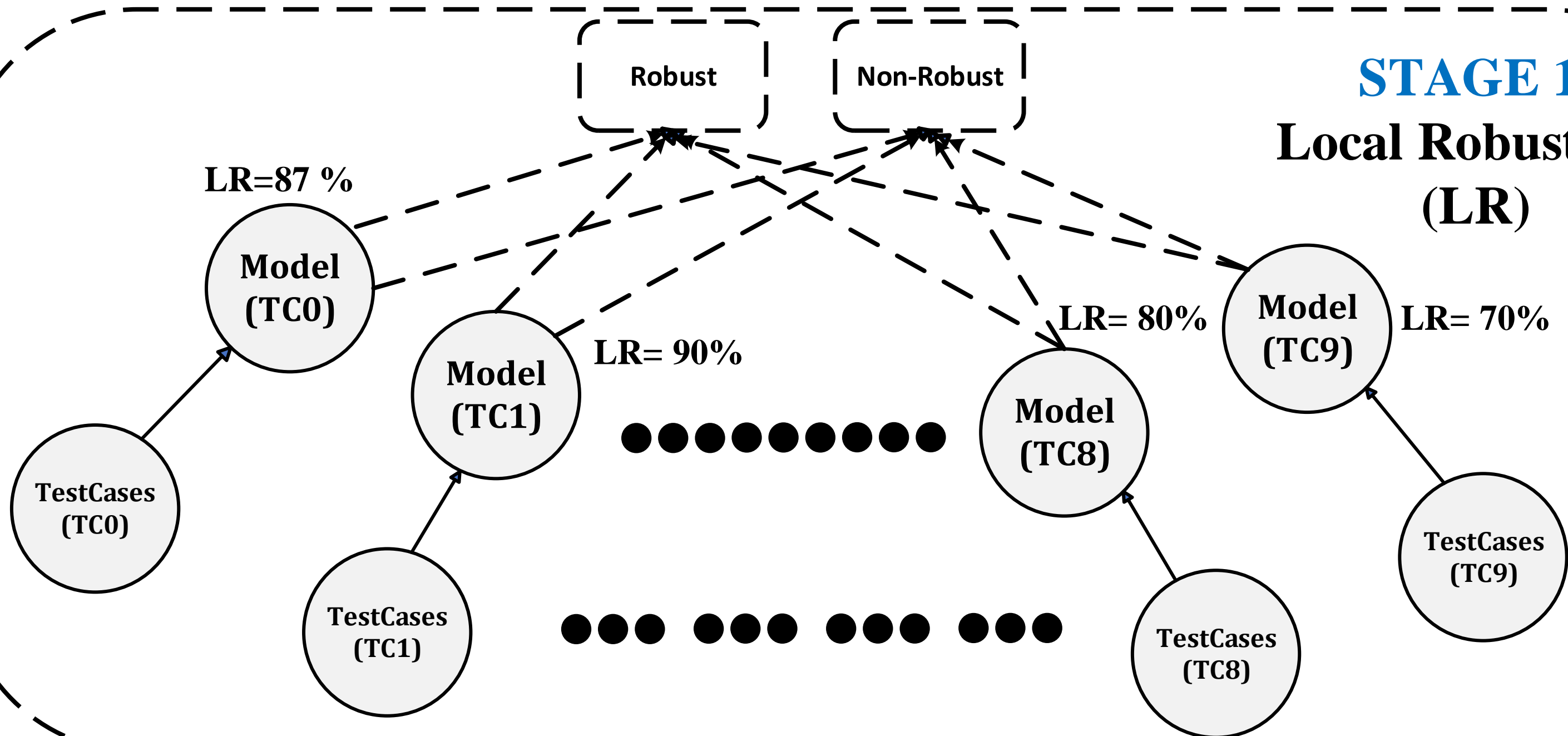
Possible unique pairs

(0, 1), (0, 2), (0, 3), (0, 4), (0, 5), (0, 6), (0, 7), (0, 8), (0, 9),
(1, 2), (1, 3), (1, 4), (1, 5), (1, 6), (1, 7), (1, 8), (1, 9),
(2, 3), (2, 4), (2, 5), (2, 6), (2, 7), (2, 8), (2, 9),
(3, 4), (3, 5), (3, 6), (3, 7), (3, 8), (3, 9),
(4, 5), (4, 6), (4, 7), (4, 8), (4, 9),
(5, 6), (5, 7), (5, 8), (5, 9),
(6, 7), (6, 8), (6, 9),
(7, 8), (7, 9),
(8, 9)

$M(TCn) + M(TCn) = TCn + TCn$
i.e.. n = 0,1,2,3,4..9



STAGE 1:
Local Robustness
(LR)



$T(D) = TC0, TC1, TC2, ..., TC9$

Random noise
(Guassian)

Apply Property

Transformations (rotation,
brightness)

$D = C0, C1, C2, ..., C9$

Dataset