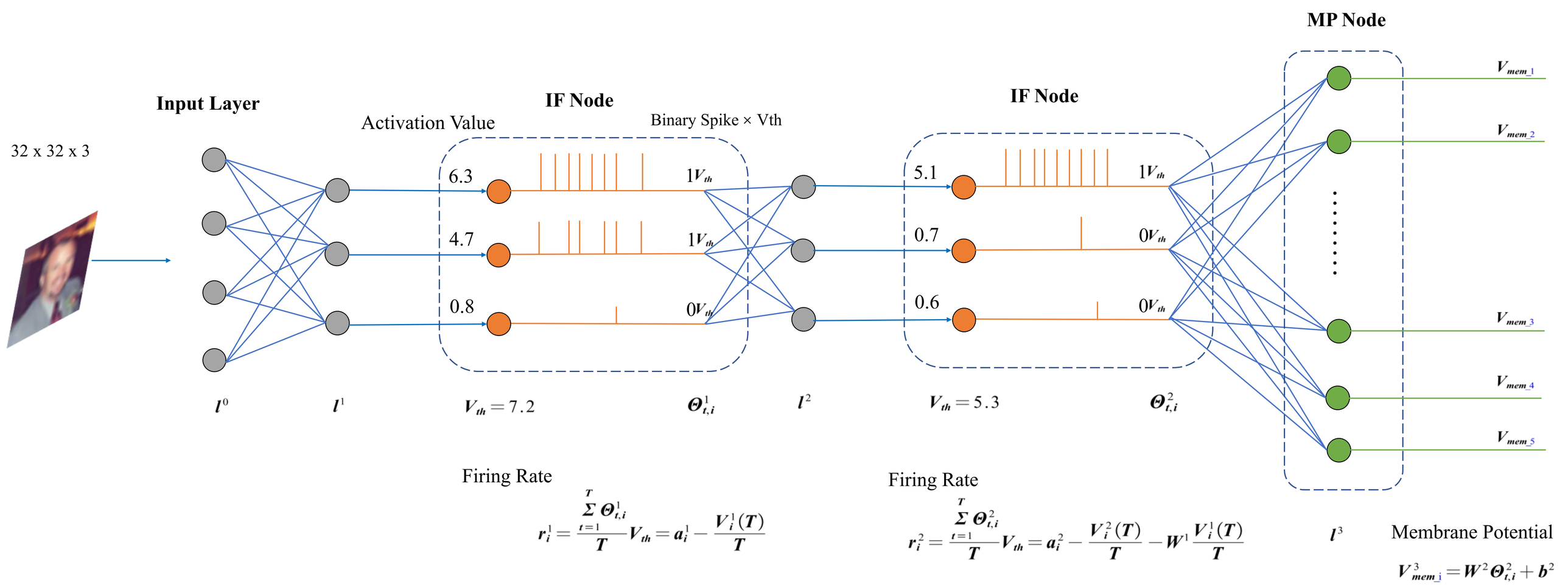
Input Layer
32 x 32 x 3
Activation Value
IF Node
Binary Spike × Vth
6.3
4.7
0.8
$1V_{th}$
$1V_{th}$
$0V_{th}$
IF Node
5.1
0.7
0.6
$1V_{th}$
$0V_{th}$
$0V_{th}$
MP Node
V_{mem_1}
V_{mem_2}
V_{mem_3}
V_{mem_4}
V_{mem_5}
l^0
l^1
$V_{th} = 7.2$
$\Theta^1_{t,i}$
l^2
$V_{th} = 5.3$
$\Theta^2_{t,i}$
l^3
Firing Rate
$r_i^1 = \frac{\sum_{t=1}^{T} \Theta^1_{t,i}}{T} V_{th} = a_i^1 - \frac{V_i^1(T)}{T}$
Firing Rate
$r_i^2 = \frac{\sum_{t=1}^{T} \Theta^2_{t,i}}{T} V_{th} = a_i^2 - \frac{V_i^2(T)}{T} - W^1 \frac{V_i^1(T)}{T}$
Membrane Potential
$V^3_{mem\_i} = W^2 \Theta^2_{t,i} + b^2$