Sliding window

...

$$x_{i-1}$$
 x_{i+0}
 x_{i+1}
 x_{i+2}
 x_{i+3}
 x_{i+4}
...

R[4*i+0] = 1/3 * (x[4*i-1] + x[4*i+0] + x[4*i+1])

R[4*i+1] = 1/3 * (x[4*i+0] + x[4*i+1] + x[4*i+2])

R[4*i+2] = 1/3 * (x[4*i+1] + x[4*i+2] + x[4*i+3])

R[4*i+3] = 1/3 * (x[4*i+2] + x[4*i+3] + x[4*i+4])