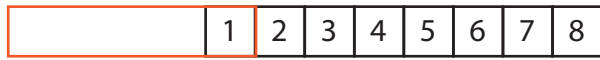


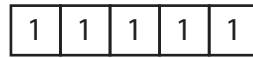
Stack Blur Algorithm by Mario Klingemann



Kernel

Pixels

At the left edge queue and stack get prefilled with leftmost edge pixel value



Queue

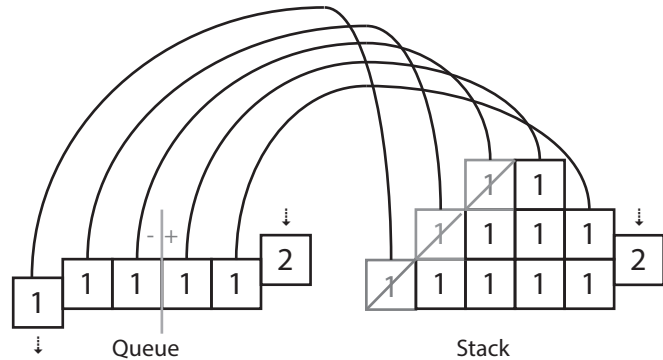
Stack

The kernel progresses one pixel to the right.
The new value is added to the queue at the right and the leftmost queue value is removed
Values in the left half of the queue get subtracted from the stack, values in the right half get added to the stack
The stack is actually just a sum of all the values, not a structure it's just here to visualize the weight of the single values
The blurred value is simply the mean of the sum.



Kernel

Pixels



Queue

Stack

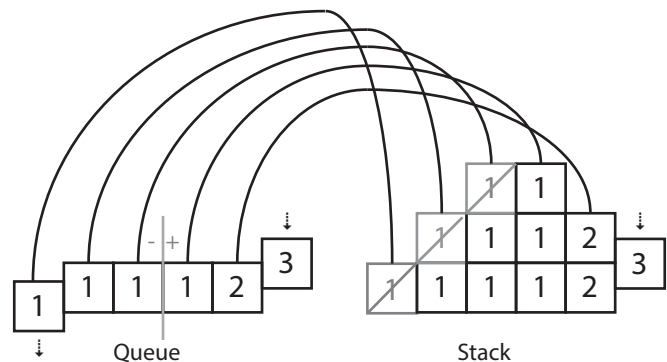
From now on the process repeats until the kernel is outside the right edge (at the right edge the rightmost pixel value gets added when the parts of the kernel are outside)

When the end of the line is reached the kernel moves down one line and starts refilling like in step #1



Kernel

Pixels



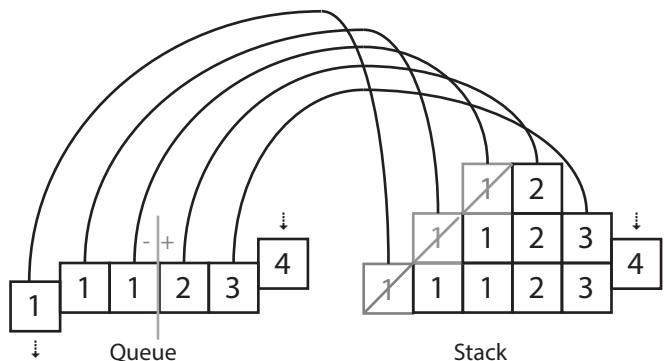
Queue

Stack



Kernel

Pixels



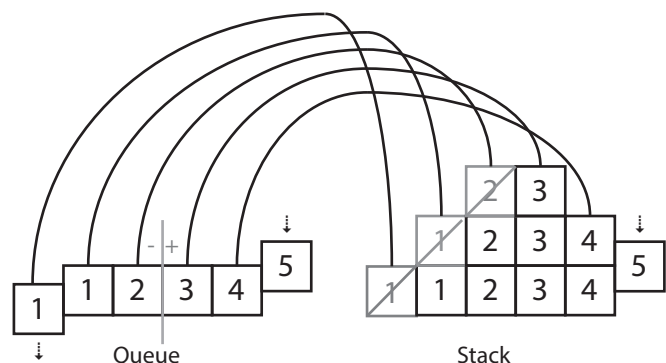
Queue

Stack



Kernel →

Pixels



Queue

Stack

When the horizontal pass is finished, the process repeats in vertical direction using the results of the horizontal pass.