**Image Processing > Custom Filter**

Custom Filter allows user to apply Matlab built-in or custom made 2D image filter on specific channel and generate a new filtered channel.

Built-in filter example:

In the dialog window, type **imboxfilt(ch1)**

will implement 2-D box filtering to all slices in ch1 and create a new channel

Custom filter example:

User makes a filter function J = NewFilter(I,arg1,arg2), where I is input image and J is filtered image.

In the dialog window, type **NewFilter(ch2,arg1,arg2)**

will create filtered ch2 as a new channel

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This XT is mostly for users with Matlab and would like to implement/test custom filters.

It is, of course, not limited to filtering. As long as the function input and output are 2D matrix of same size, this XT should work.