# Implementation a CNN Layer on FPGA

CNNs are becoming a milestone in modern image processing. Traditionally, CNNs are implemented using the Von Neumann architecture, which involves significant data movement for both filter weights and image data. In this project semenar, your task is to implement one layer CNN on a FPGA board, ensuring it performs identically to its counterpart running on a CPU or GPU.

To achieve this, you might consider fixing the filter weights on the FPGA and streaming the image data through them. Alternatively, you could instantiate multiple copies of the same filter to allow all data to be processed in a single pass. There are no strict constraints on the implementation approach; however, the most critical requirement is to preserve the original functionality of the CNN layer.
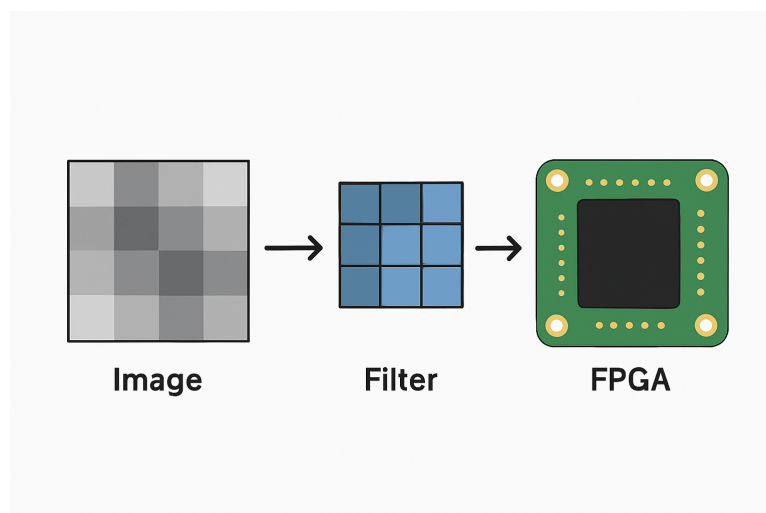
If you are interested in this topic for master thesis, please contact:

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