

Multigrid Neural Architectures – Supplementary Material

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Figure 1 illustrates our process for generating the attention maps shown in Figure 6 of the main paper. For a particular probe location, *e.g.* open green square in the center, we compute an attention map as follows. We slide an occluder, consisting of an 8×8 square of uniform random noise, across the input, and compute a corresponding output image for each position of the occluder. The maximum absolute difference between this output and the original output, in a 3×3 region around the probe, defines the magnitude of attention to the occluder (equivalently, the influence of the occluder on output at the probe). Combining contributions from all occluders yields an entire attention map.

Figures 2 and 3 provide additional spatial transformation and semantic segmentation results on MNIST, expanding upon the set of examples shown in the main paper.

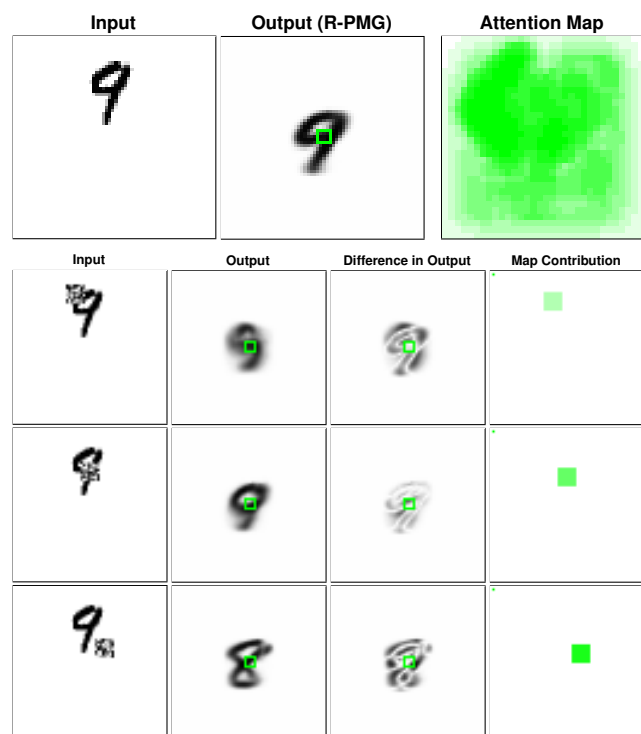


Figure 1. Attention map generation.



Figure 2. Additional MNIST spatial transformation results.

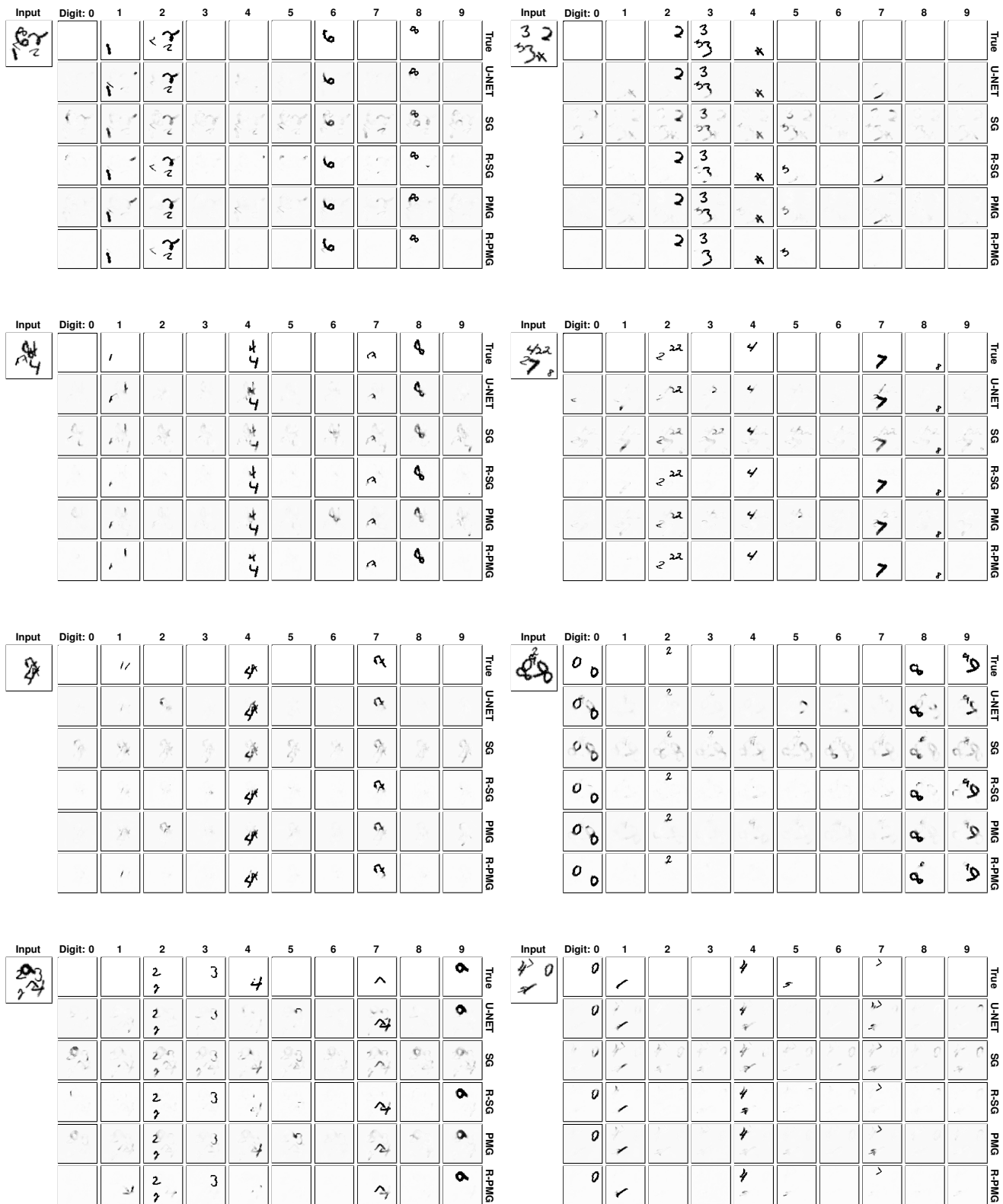


Figure 3. Additional MNIST semantic segmentation results. These examples complement Figure 4 of the main paper.