IMAGE SEAM CARVING USING DEPTH ASSISTED SALIENCY MAP

F. Shafieyan1, N. Karimi1, B. Mirmahboub1, S. Samavi1, 2, S. Shirani

$$A_{s,d}(i,j) = SM(i,j) + DM(i,j)$$

$$B_{s,d}(i,j) = |SM(i,j) - DM(i,j)|$$

$$mask_{s,d} = \begin{cases} 1 & A_{s,d} > T^A_{s,d} \text{ and } B_{s,d} < T^B_{s,d} \\ 0 & A_{s,d} < T^A_{s,d} \text{ or } B_{s,d} > T^B_{s,d} \end{cases}$$

$$mask_{s,g} = \begin{cases} 1 & A_{s,g} > T^A_{s,g} \text{ and } B_{s,g} < T^B_{s,g} \\ 0 & A_{s,g} < T^A_{s,g} \text{ or } B_{s,g} > T^B_{s,g} \end{cases}$$

$$SM_{improved}(i,j) = \begin{cases} 1 & mask_{s,d,g}(i,j) = 1 \\ SM(i,j) & mask_{s,d,g}(i,j) = 0 \end{cases}$$

$$EM(i,j) = SM_{improved}(i,j) + DM(i,j) + GM(i,j)$$