

COMPARISON BETWEEN MR. WANG'S MATLAB CODE AND  
OUR JAVA CODE USED TO CALCULATE MS-SSIM INDEX

EINSTEIN

	JAVA	WANG		
256x256	SSIM	MS-SSIM	MS-SSIM	DIFFERENCE
<b>0,8400</b>	0,8395	0,9448	0,9533	0,9%
<b>0,9888</b>	0,9873	0,9987	0,9952	0,4%
<b>0,6620</b>	0,6699	0,8916	0,8817	1,1%
<b>0,6940</b>	0,7021	0,9230	0,9254	0,3%
<b>0,9130</b>	0,9012	0,9706	0,9480	2,4%
	AVERAGE		<b>1,0%</b>	

COMPARISON BETWEEN MR. ROUSE'S MATLAB CODE AND  
OUR JAVA CODE USED TO CALCULATE MS-SSIM\* INDEX

JAVA      ROUSE

JAVA	ROUSE	
MS-SSIM*	MS-SSIM*	DIFFERENCE
0,9046	0,9287	2,6%
0,9987	0,9994	0,1%
0,7229	0,7640	5,4%
0,8517	0,8531	0,2%
0,9621	0,9679	0,6%
	AVERAGE	<b>1,8%</b>

COPPLE

	JAVA	WANG		
512x512	SSIM	MS-SSIM	MS-SSIM	DIFFERENCE
<b>0,9947</b>	0,9940	0,9996	0,9972	0,2%
<b>0,9621</b>	0,9636	0,9843	0,9695	1,5%
<b>0,8806</b>	0,9057	0,9717	0,9740	0,2%
<b>0,7500</b>	0,8335	0,9741	0,9754	0,1%
<b>0,7183</b>	0,7577	0,9589	0,9624	0,4%
<b>0,7039</b>	0,7485	0,9591	0,9622	0,3%
<b>0,6761</b>	0,8010	0,9562	0,9565	0,0%
	AVERAGE		<b>0,4%</b>	

JAVA      ROUSE

JAVA	ROUSE	
MS-SSIM*	MS-SSIM*	DIFFERENCE
0,9996	0,9996	0,0%
0,9806	0,9817	0,1%
0,9546	0,9564	0,2%
0,9549	0,9562	0,1%
0,9281	0,9320	0,4%
0,9276	0,9311	0,4%
0,9059	0,9097	0,4%
	AVERAGE	<b>0,2%</b>

LENA

	512x512	JAVA	WANG	
512x512	SSIM	MS-SSIM	MS-SSIM	DIFFERENCE
<b>0,9894</b>	0,9890	0,9990	0,9920	0,7%
<b>0,9372</b>	0,9492	0,9709	0,9379	3,5%
<b>0,6494</b>	0,7224	0,9007	0,9121	1,2%
<b>0,4408</b>	0,4979	0,8696	0,8860	1,9%
<b>0,3891</b>	0,4466	0,8661	0,8801	1,6%
<b>0,3461</b>	0,6933	0,8524	0,8564	0,5%
<b>0,2876</b>	0,6755	0,8410	0,8048	4,5%
	AVERAGE		<b>2,0%</b>	

JAVA      ROUSE

JAVA	ROUSE	
MS-SSIM*	MS-SSIM*	DIFFERENCE
0,9990	0,9989	0,0%
0,9605	0,9632	0,3%
0,8087	0,8239	1,8%
0,7554	0,7748	2,5%
0,7452	0,7659	2,7%
0,7027	0,7025	0,0%
0,5579	0,5882	5,2%
	AVERAGE	<b>1,8%</b>

All images are extracted from Mr. Wang's page: Demo Images and Free Software for "A Universal Image Quality Index" in  
[http://www.cns.nyu.edu/~zwang/files/research/quality\\_index/demo.html](http://www.cns.nyu.edu/~zwang/files/research/quality_index/demo.html)