Computer Vision – Homework/Project 1

Implement, in Matlab, an algorithm to generate a set of Gabor kernels for linear filters, i.e., your algorithm should plot a set of small images with the corresponding Gabors. An example (not the only option) is shown below.

Upload your algorithm and a 1-page report in Carmen by the deadline. Your report should provide a brief description of what your algorithm does and an image of its output (e.g., as in the image below).

$\int \theta$	0	$\frac{\pi}{8}$	$\frac{2\pi}{8}$	$\frac{3\pi}{8}$	$\frac{4\pi}{8}$	$\frac{5\pi}{8}$	$\frac{6\pi}{8}$	$\frac{7\pi}{8}$
0.25		111	///	///	=		#	///
0.18	=	-	///	///		1111	111	#
0.13		1	///	///		111	//	///
0.09	Ш	N	×			M	//	III
0.06	=				Ш	W		II