1996 Paper 9 Question 12

Computer Vision

Using appropriate mathematical expressions, define the following operations commonly used in computer vision and briefly explain their function and applications:

(a)	convolution	[4 marks]
(b)	correlation	[4 marks]
(c)	bandpass filtering	[4 marks]
(d)	edge detection by second-derivative zero-crossings	[4 marks]
(e)	invariant transform	[4 marks]