



Digital Image Processing, 3rd ed.

Gonzalez & Woods

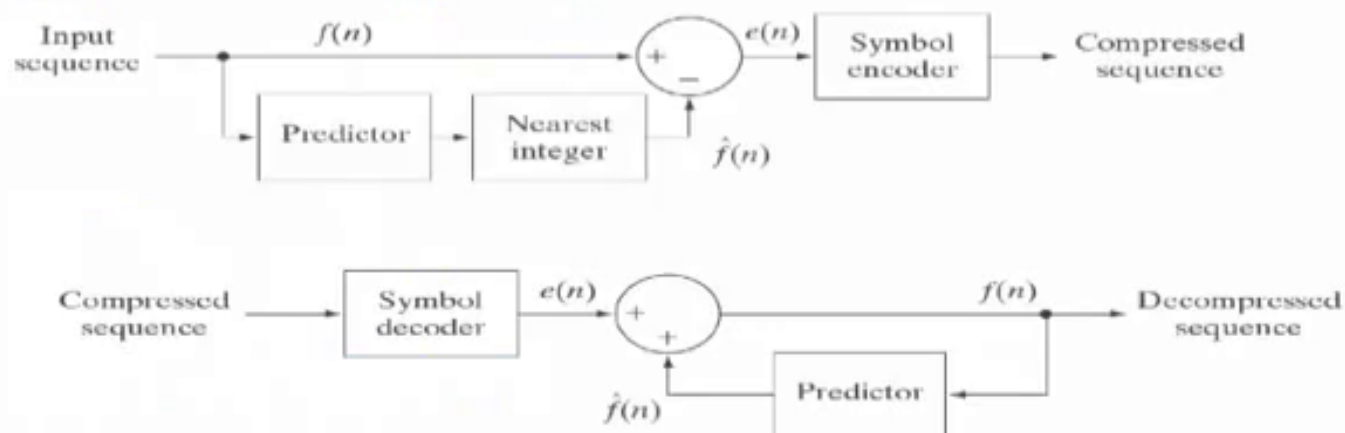
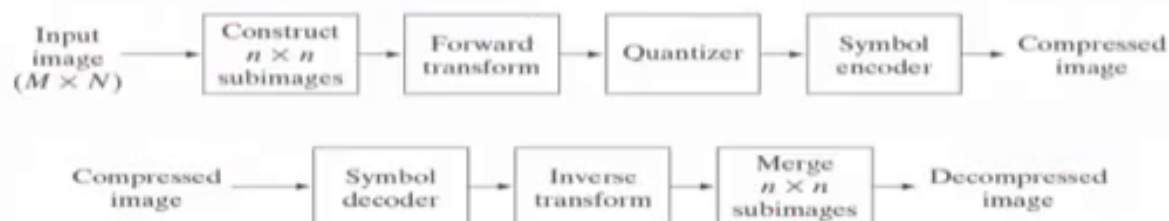
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Chapter 8

Image Compression



Predictive lossless compression





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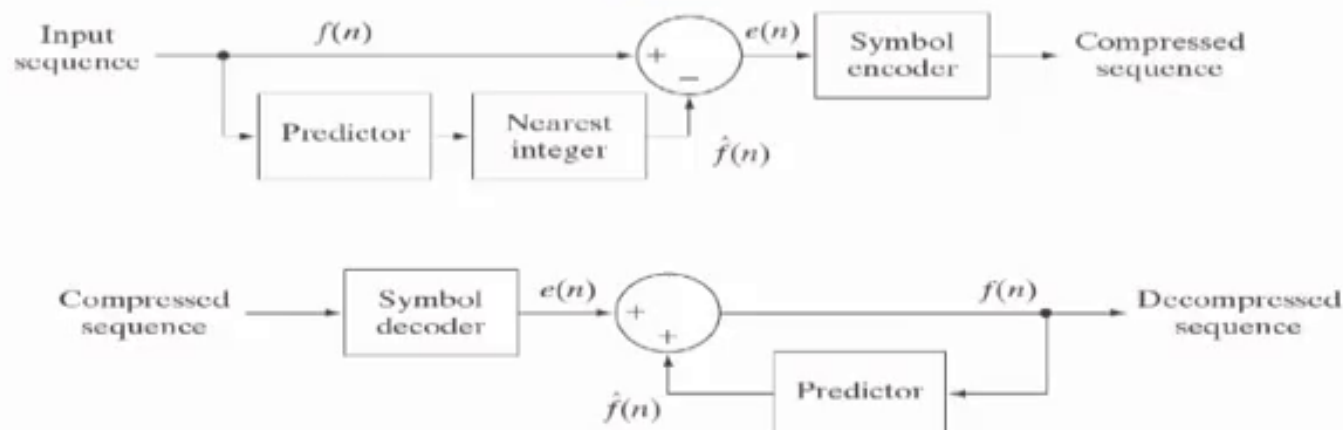
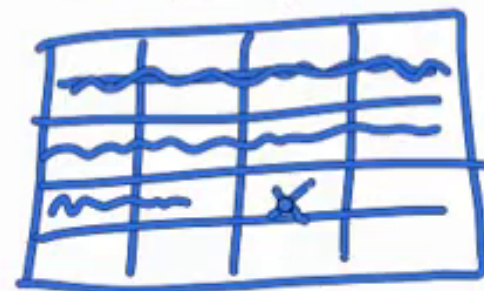
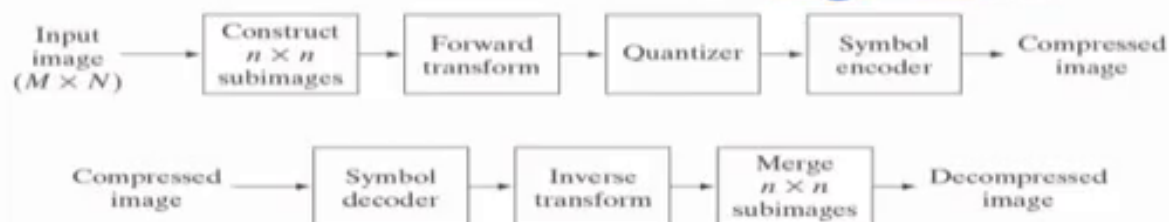
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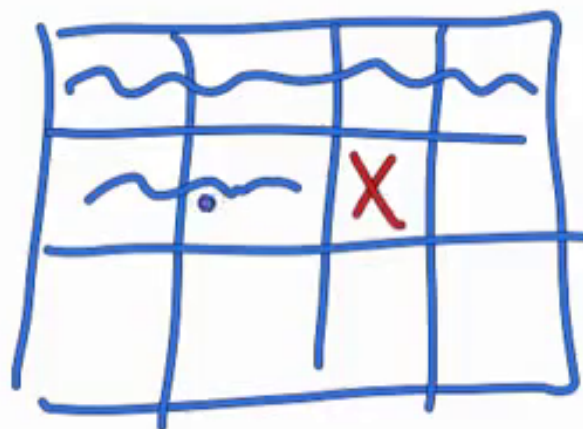
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Examples of predictors and JPEG-LS



$$F(x-1, y)$$
$$e = f(x-1, y) - f(x, y)$$



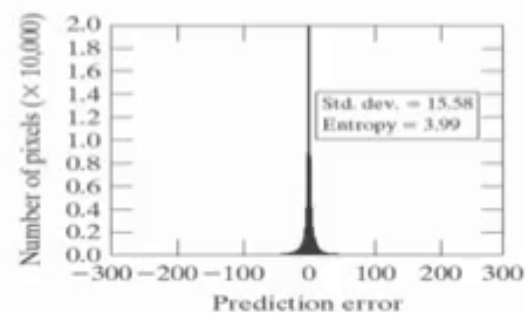
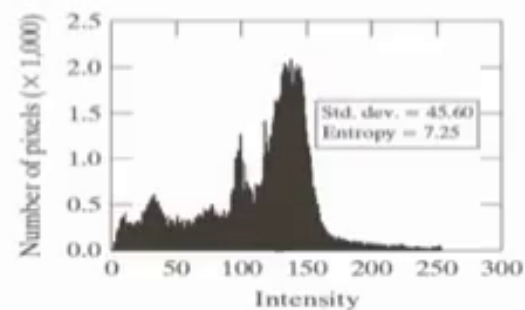
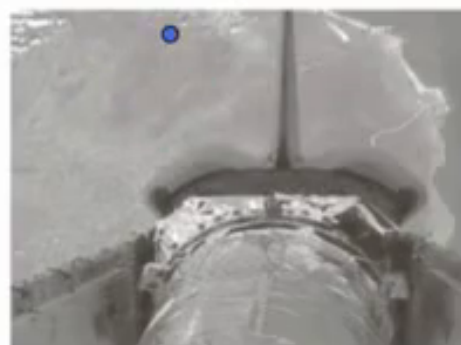
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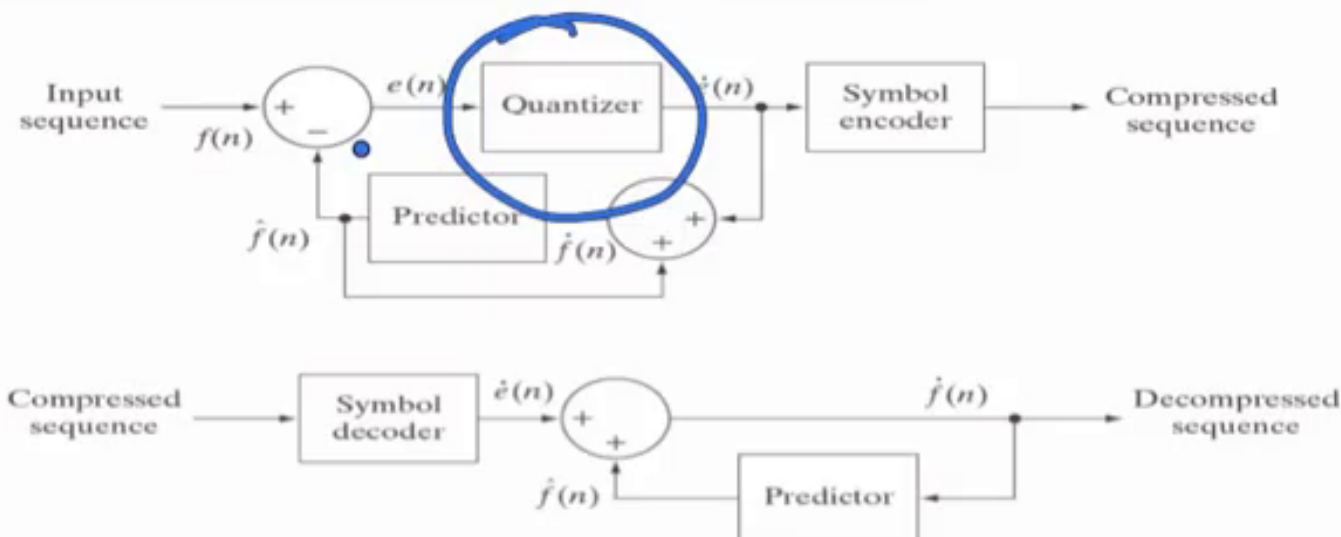
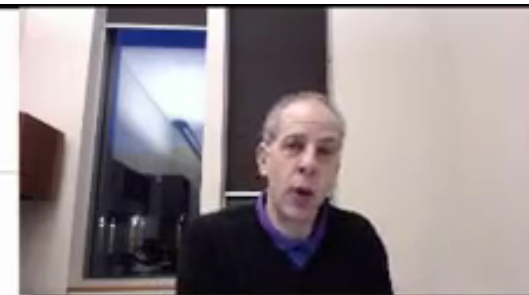
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a
b

FIGURE 8.41
A lossless
predictive
coding model:
(a) encoder;
(b) decoder.



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Temporal prediction (MPEG)

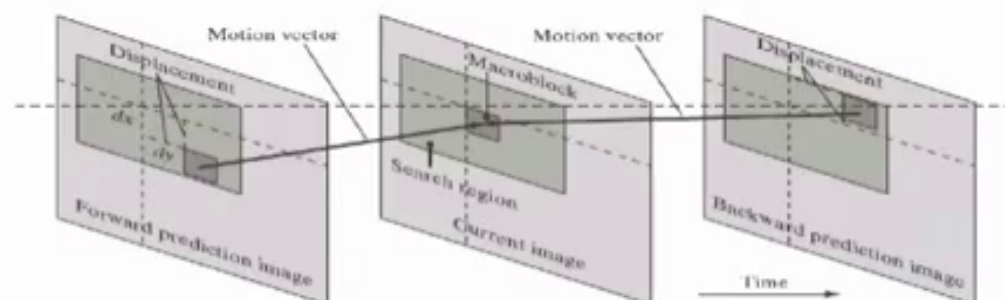


FIGURE 8.36
Macroblock
motion
specification.

Students: Good place to take a break if you need it.

Duke
UNIVERSITY



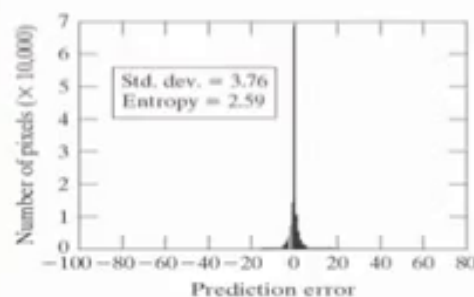
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