

# Matrix-Based Transforms

Image Processing

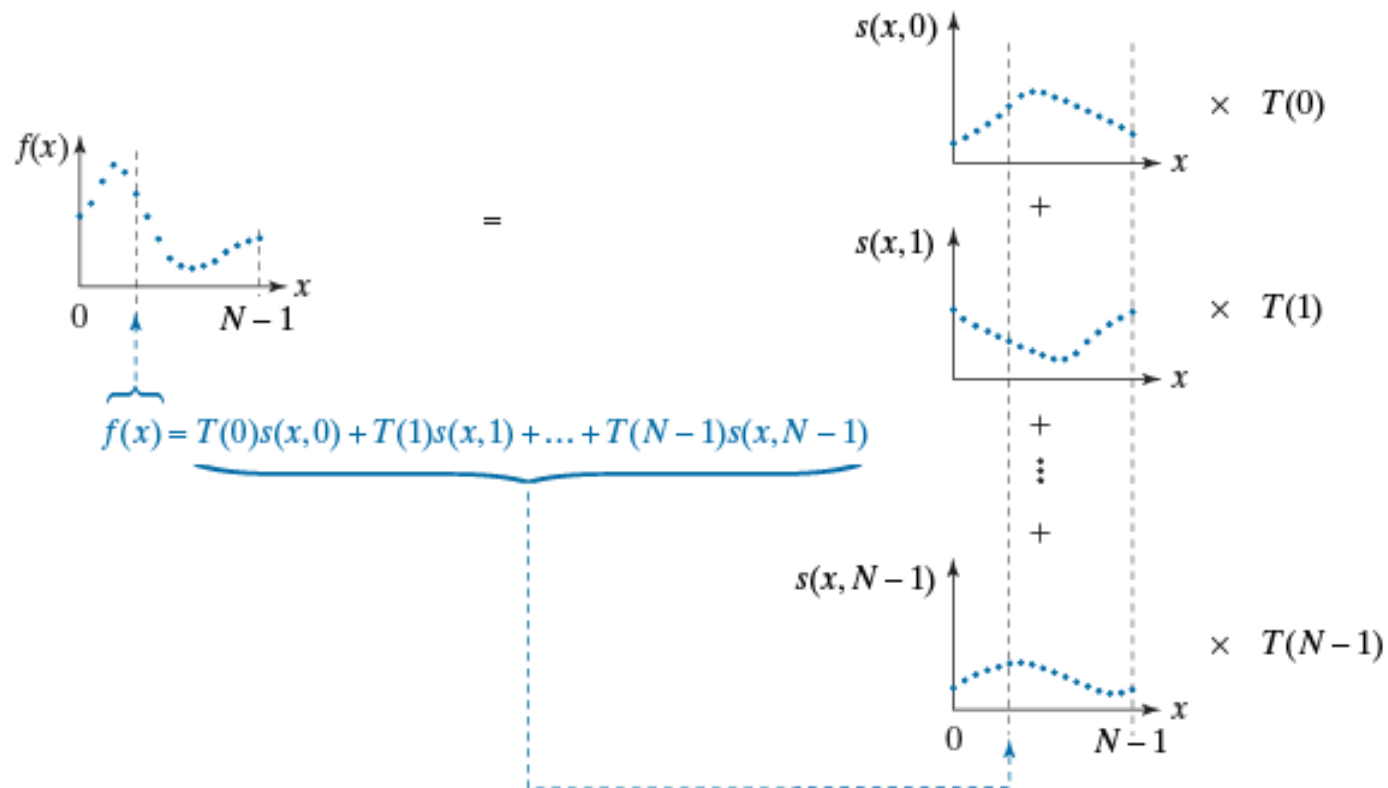
CSE 166

Lecture 12

# Reading

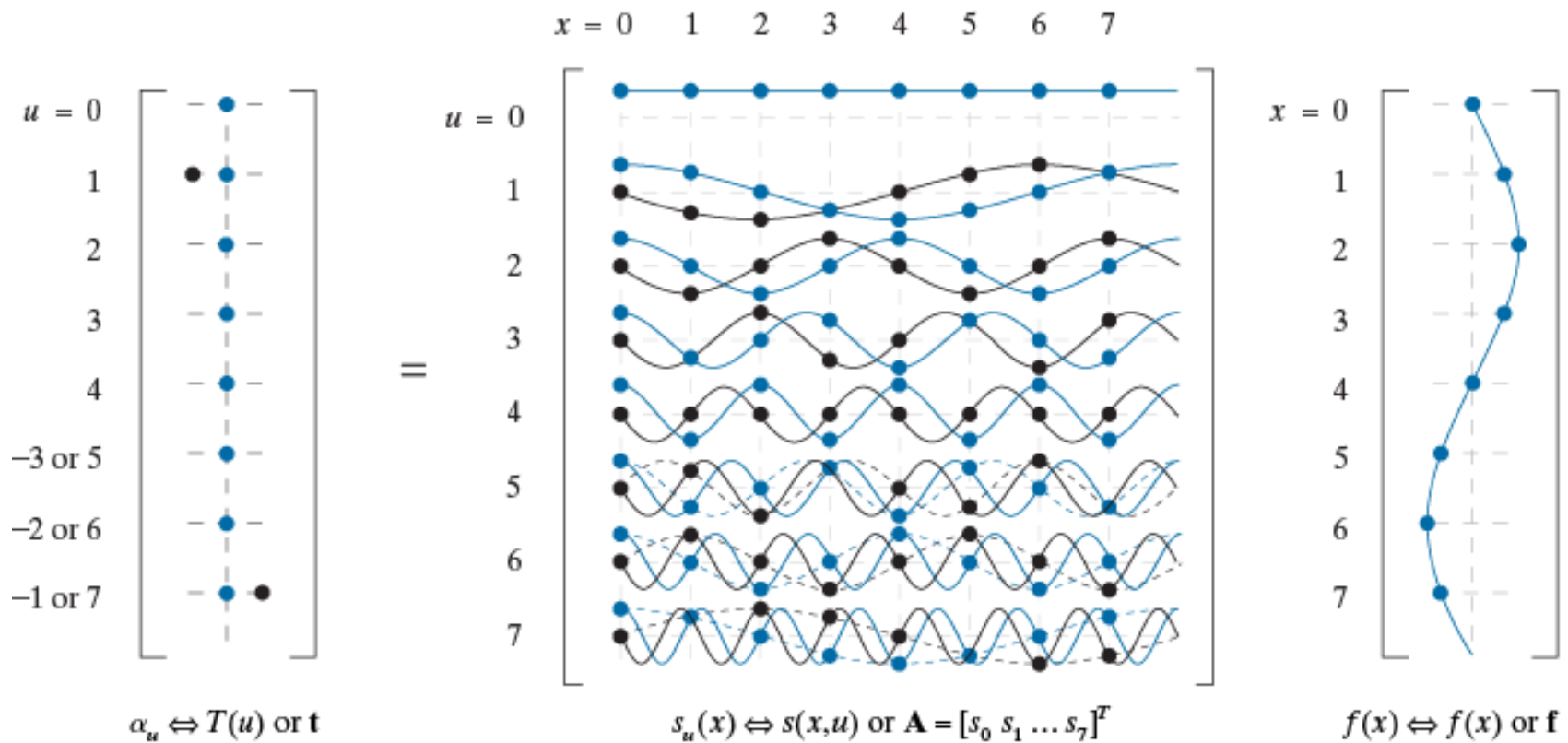
- Digital Image Processing, 4th edition
  - Chapter 6: Wavelet and Other Image Transforms
    - Sections 6.2

# General inverse transform using basis vectors



# Matrix-Based Transform

Example: 8-point DFT of  $f(x) = \sin(2\pi x)$



real part + imaginary part