Blog Entry © Thursday, March 5, 2026, by James Pate Williams, Jr., Simple Filtering of a Noisy Signal in the Programming Language C
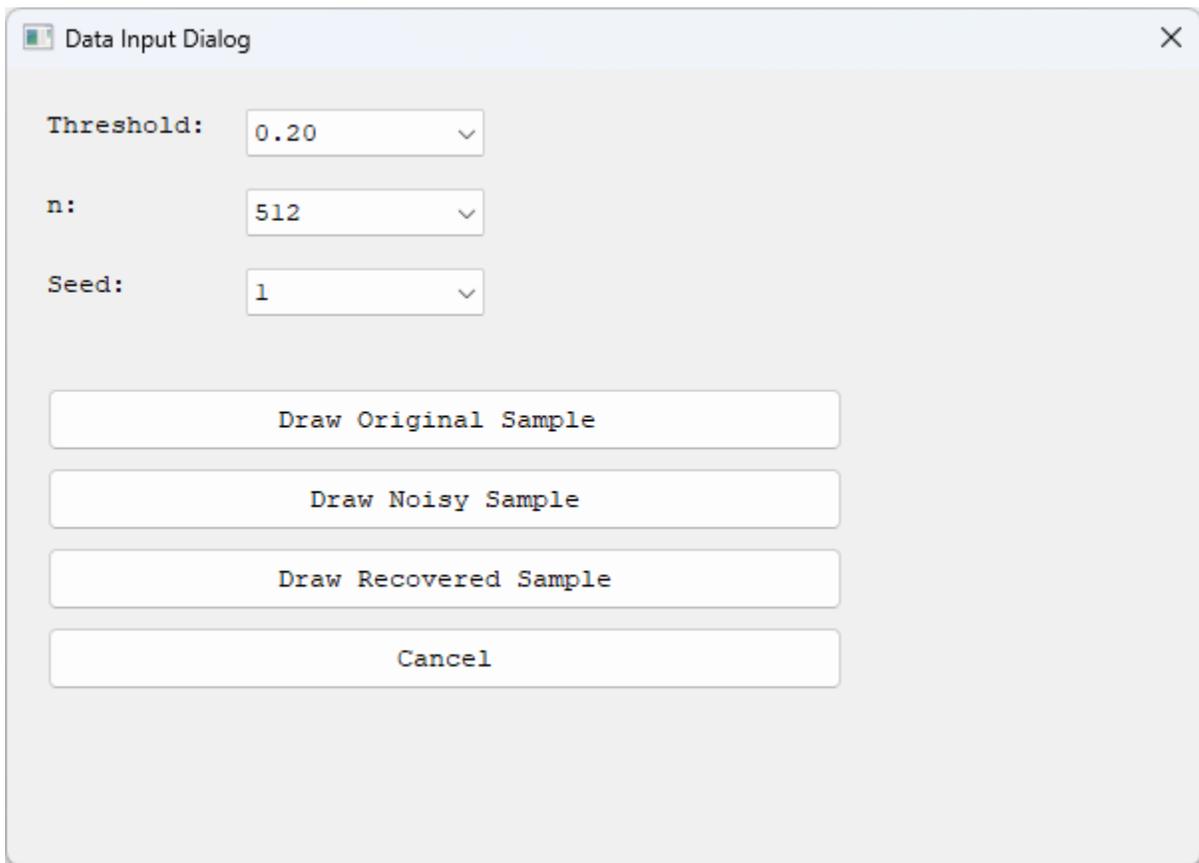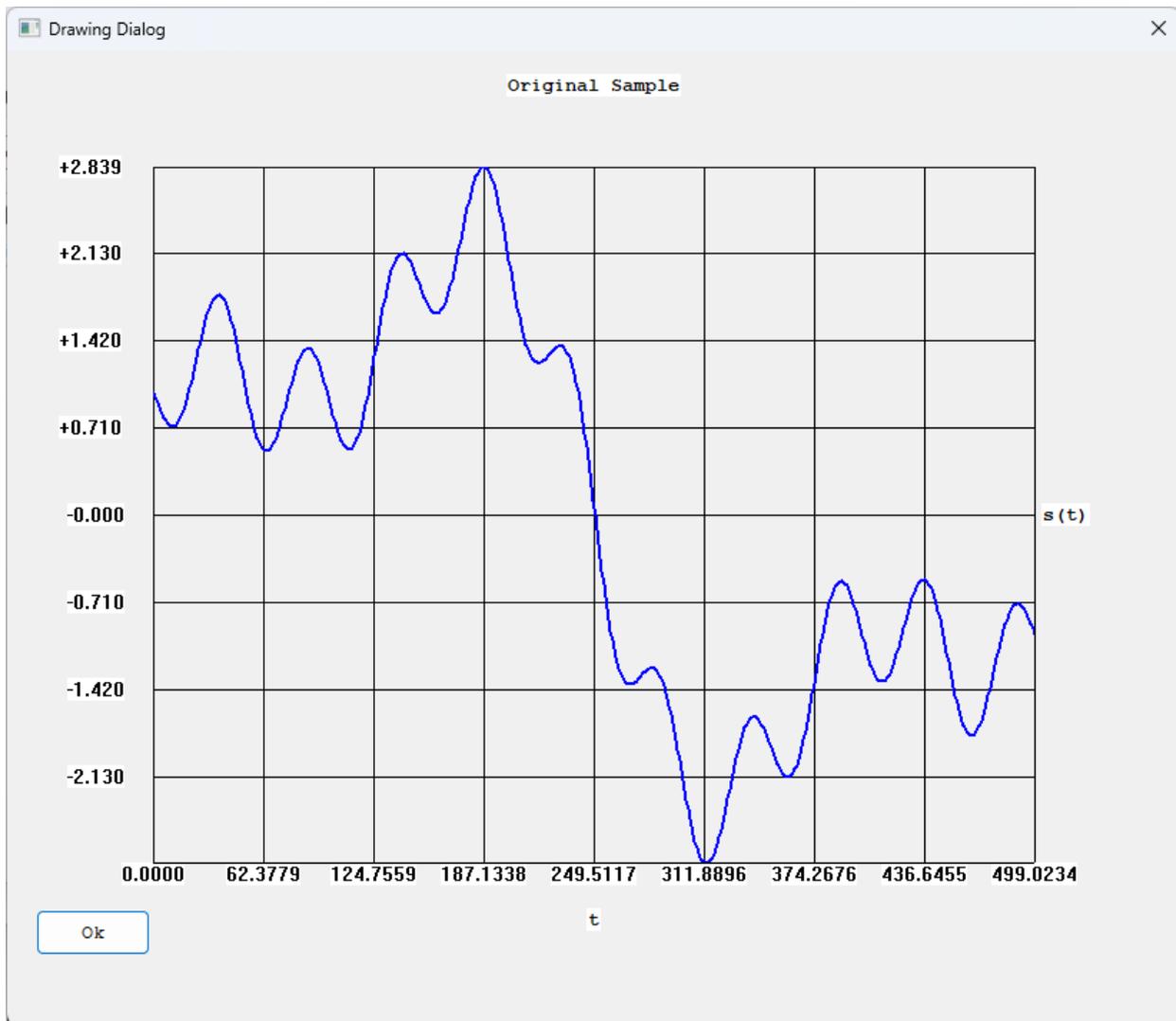
Figure 1 Data Input Dialog

Figure 2 Original Sample
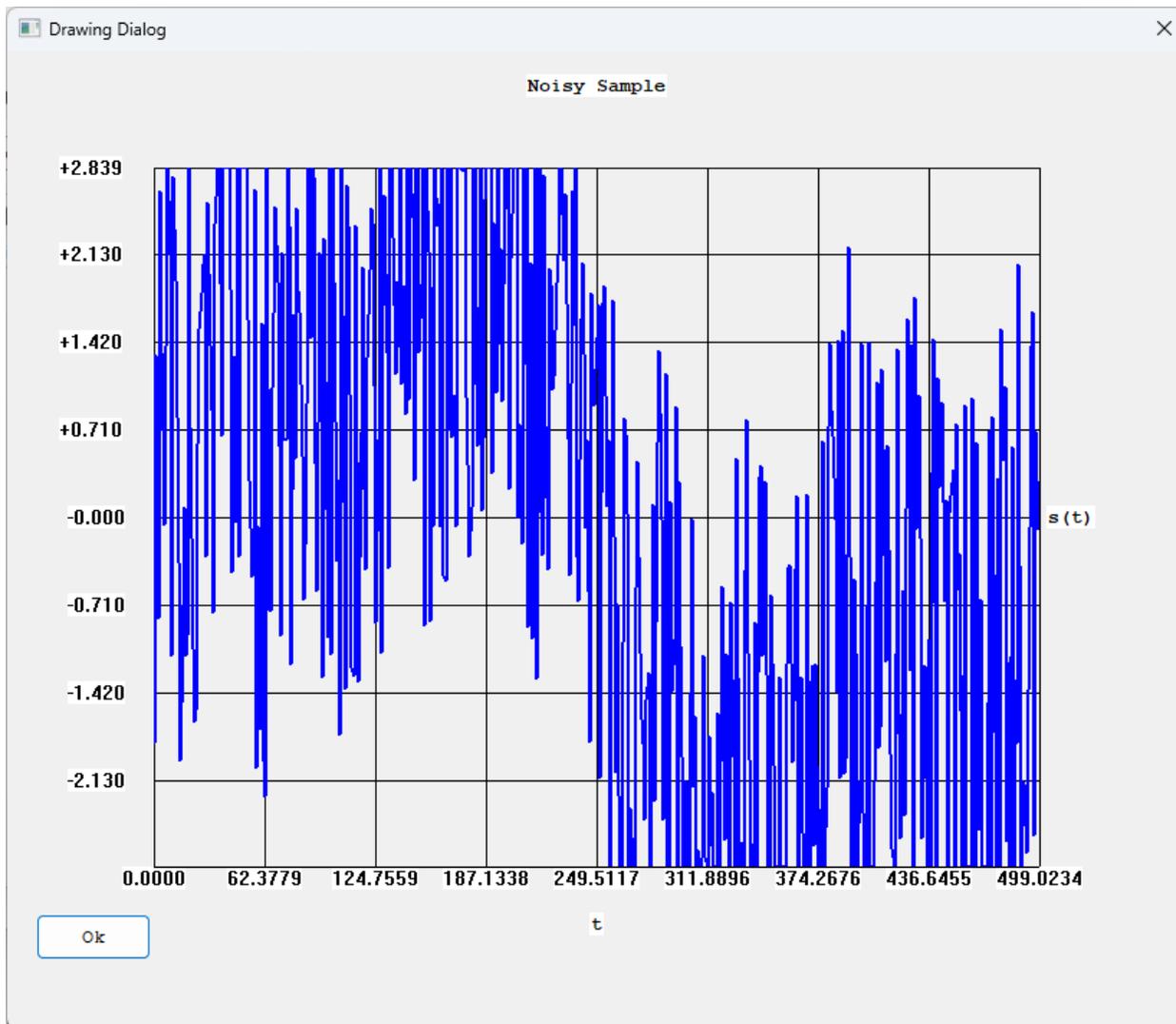
Figure 3 Original Sample After Adding White Noise
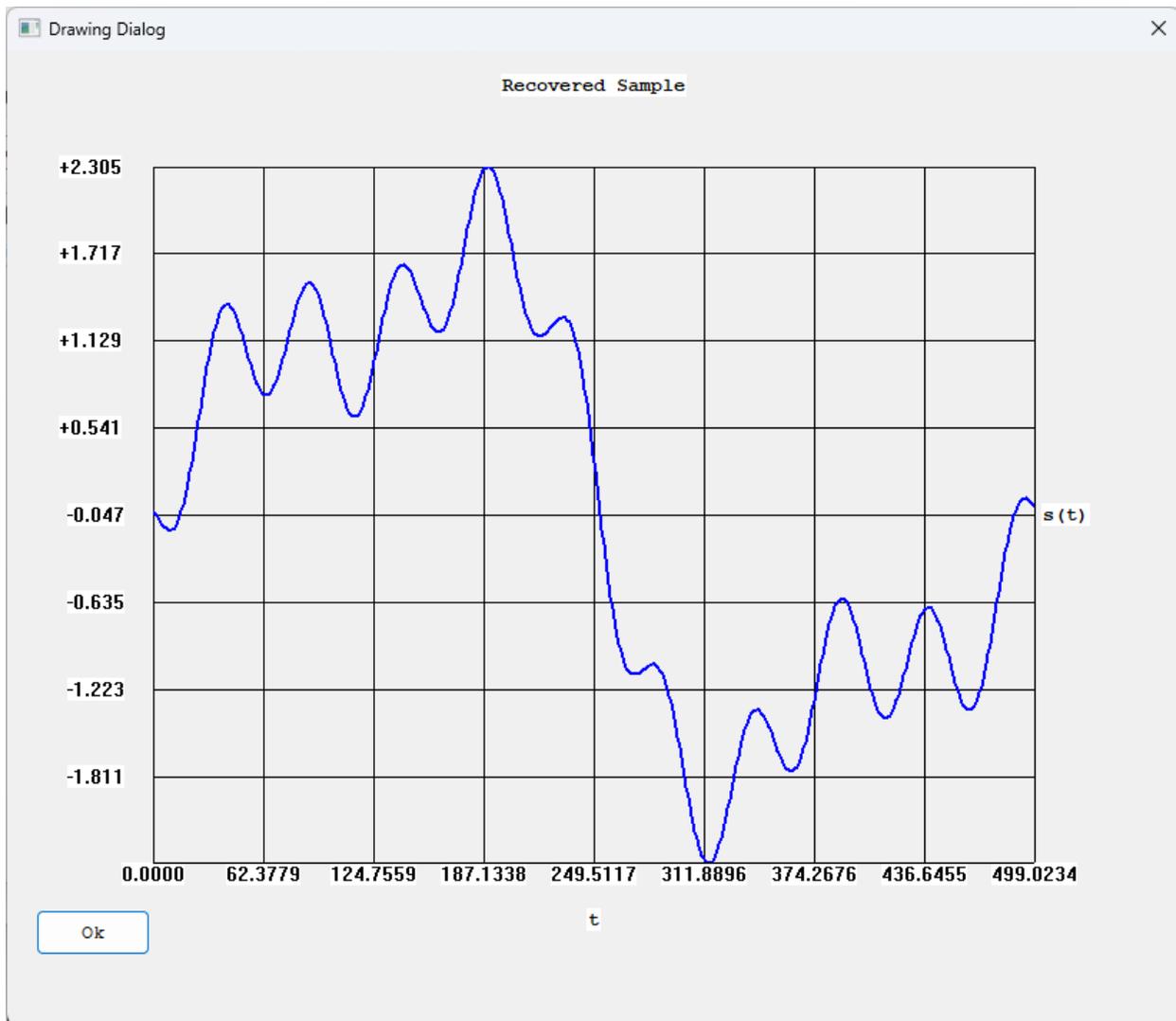
Figure 4 Recovered Sample Threshold 0.15

Figure 5 Recovered Sample Threshold 0.20

As can be seen the sample recovery using a filtering algorithm via a discrete Fourier and discrete inverse Fourier transform is a lossy process.