

Digital Filters & Systems

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☐ **DTLTI Systems, Transfer Functions, and the Z-transform**

Explanation of Discrete Time Linear Time-Invariant Systems, transfer functions, and the Z-transform.

☐ **Exponential Moving Average**

Digital exponential moving average filters explained, as well as an implementation in C++, and simulation in MATLAB.

☐ **Simple Moving Average**

Digital simple moving average filters explained.

☐ **Discretization**

Converting continuous-time filters to discrete-time filters.

Simple Finite Impulse Response Notch Filter

Designing a simple FIR notch filter to suppress a single frequency.