DSP Services Design Document: REST APIs

# Overview

# Block Processing APIs

## One Dimensional Time Series

* api/v1/block/fft/1d/ts\_to\_fs
  + POST
    - CSV in body with two sections:
      * TIMESERIES:sample rate hz  
        sample[crlf]  
        sample[crlf]  
        sample[crlf]….  
        [crlf]
      * FILTERKERNEL # From DC to Nyquist frequency, missing values assumed to be 1  
        FREQ\_MULT[crlf]  
        FREQ\_MULT[crlf]…
    - Note FILTERKERNEL is optional.
  + RETURN VALUE
    - Original CSV with new sections:
      * FREQUENCYSPECTRUM # All amplitudes from DC to Nyquist
        + Amplitude[crlf]
        + Amplitude[crlf]
        + Amplitude[crlf]…
* api/v1/block/fft/1d/fs\_to\_ts
  + POST
    - CSV in body with one section
      * FREQUENCYSPECTRUM # All amplitudes from DC to Nyquist (one row per hz)

# Stream Processing APIs