

# ADDING ECHOS

Version 0.1  
Computing  
COMP120

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This adds an echo to an input list,  $s$ , extending the input by  $t$  seconds and combining the input list with a delayed copy of itself.

This algorithm depends on the sample rate,  $S$ , which is used to convert a duration in seconds to a duration in samples.

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## Algorithm 1 Adding Echos

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### Require:

$$1 \leq t$$
$$1 \leq S$$

▷ Sample Rate

### Ensure:

```
1: function ECHO( $s, t$ )
2:    $n \leftarrow$  LIST
3:    $o \leftarrow tS$ 
4:   for  $i = 0, i < \text{len}(s) + o$  do
5:      $v \leftarrow 0$ 
6:     if  $i < \text{len}(\text{sample})$  then
7:        $v \leftarrow v + s_i$ 
8:     end if
9:     if  $i - o > 0$  then
10:       $v \leftarrow v + s_{i-o}$ 
11:    end if
12:     $n \leftarrow v$ 
13:  end for
14:  return  $n$ 
15: end function
```

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