

Non-deterministic Sorting ASM

- Non-deterministic sorting by iterating local swap

choose i, j in $\text{dom}(a)$ s.t. $i < j$ & $a(i) > a(j)$

$a(i) := a(j)$

$a(j) := a(i)$

Sampling increasing real-time moments for firing a rule in a discrete time sequence

Goal: approximate a continuous set of rules $\text{rule}(t, t')$ with $t < t'$, which are to be fired in a discrete time sequence, **by a finite number of samples with increasing sequence of real interval boundaries**

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choose  $t > \text{currtime}$  in  
     $\text{rule}(\text{currtime}, t)$   
     $\text{samples} := \text{add}(t, \text{samples})$   
     $\text{currtime} := t$ 
```

Here currtime is a monitored function which is supposed to evolve continuously