

ICCMA 2017

Algorithm for benchmark selection

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Algorithm 1 describes the procedure for selecting instances to be employed at the 2nd International Competition on Computational Models of Argumentation (ICCMA 2017).

Algorithm 1 Algorithm for selecting instances based on classification

Require: D : set of domains.

Require: $\{I_d\}_{d \in D}$: set of instances for each domain d .

Require: n : desired number of instances.

Ensure: $\{S_d\}_{d \in D}$: set of selected instances for each domain d .

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1:  $S_d = \emptyset$  for each domain  $d \in D$ 
2:  $D = \{d \in D \mid I_d \neq \emptyset\}$ 
3: while  $\sum_{d \in D} |I_d| < n$  do
4:   if  $n - \sum_{d \in D} |I_d| \geq |D|$  then
5:      $D' = D$ 
6:   else
7:     select  $D' \subseteq D$  randomly such that  $|D'| = n - \sum_{d \in D} |I_d|$ 
8:   end if
9:   for all  $d \in D'$  do
10:    randomly select  $i \in I_d$ 
11:     $S_d = S_d \cup \{i\}$ 
12:     $I_d = I_d \setminus \{i\}$ 
13:   end for
14:    $D = \{d \in D \mid I_d \neq \emptyset\}$ 
15: end while
16: return  $\{S_d\}_{d \in D}$ 
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