Additional file: the algorithm in one block

Below is the algorithm in one block[1].

ask for $size(D)$
$size(D) = min(size(D), 2^n)$
generate $D \subseteq S$
$H = \{\}$
$A_{physio} = \{\}$
for $x_0 \in D$ **do**
    $k = 1$
    $\boldsymbol{x}(1) = x_0$
    while 1 **do**
        if $\exists w \in H : \boldsymbol{x}(k) \in w$ **then**
            break
        end if
        $\boldsymbol{x}(k+1) = \boldsymbol{f}_{physio}(\boldsymbol{x}(k))$
        if $\exists k' \in [\![1, k]\!] : \boldsymbol{x}(k+1) = \boldsymbol{x}(k')$ **then**
            $A_{physio} = A_{physio} \cup \{(\boldsymbol{x}(k'), \ldots, \boldsymbol{x}(k))\}$
            break
        end if
        $k = k + 1$
    end while
    $H = H \cup \{(\boldsymbol{x}(1), \ldots, \boldsymbol{x}(k))\}$
end for
return A_{physio}
ask for $r_{min}, r_{max}, max_{targ}, max_{moda}$
$r_{max} = min(r_{max}, n)$
$golden\_set = \{\}$
$silver\_set = \{\}$
for $r \in [\![r_{min}, r_{max}]\!]$ **do**
    $max^r_{targ} = min(max_{targ}, n!/(r! \cdot (n-r)!))$
    $max^r_{moda} = min(max_{moda}, 2^r)$
    $C_{targ} = \{\}$
    $C_{moda} = \{\}$
    while $size(C_{targ}) < max^r_{targ}$ **do**
        generate $c_{targ} \notin C_{targ}$
        $C_{targ} = C_{targ} \cup \{c_{targ}\}$
    end while
    while $size(C_{moda}) < max^r_{moda}$ **do**
        generate $c_{moda} \notin C_{moda}$
        $C_{moda} = C_{moda} \cup \{c_{moda}\}$
    end while
    for $c_{targ} \in C_{targ}$ **do**
        for $c_{moda} \in C_{moda}$ **do**
            $H = \{\}$
            $A_{patho} = \{\}$
            for $x_0 \in D$ **do**
                $k = 1$

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                    x(1) = x_0
                    while 1 do
                        if ∃w ∈ H : x(k) ∈ w then
                            break
                        end if
                        x(k+1) = f_patho(x(k))
                        for targ_i ∈ c_targ do
                            for v_j ∈ V do
                                if v_j = targ_i then
                                    x_j(k+1) = moda_i
                                end if
                            end for
                        end for
                        if ∃k' ∈ [[1, k]] : x(k+1) = x(k') then
                            A_patho = A_patho ∪ {(x(k'), ..., x(k))}
                            break
                        end if
                        k = k + 1
                    end while
                    H = H ∪ {(x(1), ..., x(k))}
                end for
                if A_patho ⊆ A_physio then
                    if A_patho = A_physio then
                        golden_set = golden_set ∪ {(c_targ, c_moda)}
                    else
                        silver_set = silver_set ∪ {(c_targ, c_moda)}
                    end if
                end if
            end for
        end for
    end for
    return golden_set
    return silver_set
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