Programming Nice exercises written components

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October 2022

Thursday 29-9

Algorithm 1: Algorithm neuron 1/4

Data: $V_m = -70, V_t = -55$
Result: $V_m = -50$
$V_m \leftarrow V_m + 20$ return V_m

Algorithm 2: Algorithm neuron 2/4

Data: $V_m = -70, V_t = -55$
Result: $V_m = -45$
$V_m \leftarrow -65$;
$V_m \leftarrow V_m + 20$;
return V_m;

Algorithm 3: Algorithm neuron 3/4

Data: $V_m = -70$, $V_t = -55$, spike=$False$
Result: spike = $True$
$V_m \leftarrow -72$;
while *spike* = $False$ **do**
    spike $\leftarrow$ *checkSpike*() ;
    $V_m \leftarrow V_m + 5$;
    if *spike* == $True$ **then**
        return spike ;
    end
end

Algorithm 4: Algorithm neuron 4/4

Data: $V_m = -70$, $V_t = -55$, spike=$False$
Result: $V_m + numb$
Write "How much potential is added to the membrane" ;
Read numb ;
$V_m \leftarrow V_m + numb$;
return V_m ;