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Input:  $P$ - OSG post,  $\mathcal{T}_E$ - Emotion thesaurus,  $\mathcal{T}_m$ - Intensity modifier
thesaurus
Output:  $E(P)$  - Emotion vector of OSG post  $P$ 
 $E(P) \leftarrow \emptyset$ 
 $P \leftarrow \text{Preprocess}(P)$  // remove URLs, numbers, punctuations
 $\{w\}_P \leftarrow \text{Tokenize}(P)$  // tokenise the post into words

for  $i \leftarrow 1$  to 16 do
     $\mathcal{T}_{Ei} \leftarrow \mathcal{T}_E$ 
     $e_i \leftarrow 0$ 
     $w_{prev} \leftarrow null$ 
    foreach  $w$  in  $\{w\}_P$  do
        // lookup  $w$  in emotion  $i$  term list
        if  $w \in \mathcal{T}_{Ei}$  then
             $e_i \leftarrow e_i + 1$ 

            // lookup  $w_{prev}$  in intensity modifier thesaurus
            if  $w_{prev} \neq null$  and  $w_{prev} \in \mathcal{T}_m$  then
                 $e_i \leftarrow e_i + \mathcal{T}_m(w_{prev})$ 
             $w_{prev} \leftarrow w$ 
     $e_i \leftarrow e_i / |\{w\}_P|$ 
     $E(P) \leftarrow E(P) \cup e_i$ 
return  $E(P)$ 

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S1 Fig: Algorithm for determining the 16-dimensional emotion vector E_P of a given OSG post P