Algorithm 1 SCNet Algorithm

procedure CLASSIFY(Raw EEG) ▷ The Raw EEG is input
    Total Channels ← 21
    Input Format: EEG data Channels $[e_i]$ where $i \leftarrow 0$ to 21
    $e_i \leftarrow [e_j]$ where $j \leftarrow 0$ to n where n is the number of timestamps

    Output Format: Class of the EEG in binary (Abnormal/Normal)

    Output ← PREPROCESS(Raw EEG) ▷ Preprocess the Raw EEG
    Output ← SPATIALFEATURES(Output)
    Output ← TEMPORALFEATURES(Output)
    Class ← CLASSIFY(Output)
    return Class ▷ Returns the class of the classified EEG
end procedure

Algorithm 2 Temporal Net Algorithm

procedure CLASSIFY(Raw EEG) ▷ The Raw EEG is input
    Total Channels ← 21
    Input Format: EEG data Channels $[e_i]$ where $i \leftarrow 0$ to 21
    $e_i \leftarrow [e_j]$ where $j \leftarrow 0$ to n where n is the number of timestamps

    Output Format: Class of the EEG in binary (Abnormal/Normal)

    Output ← PREPROCESS(Raw EEG) ▷ Preprocess the Raw EEG
    Output ← TEMPORALFEATURES(Output)
    Class ← CLASSIFY(Output)
    return Class ▷ Returns the class of the classified EEG
end procedure

Algorithm 3 Feature Extraction using CNNs

procedure FEATURES(raw)
    Input Format: $[e_{ij}]$ where $i \leftarrow 0$ to h_0 and $j \leftarrow 0$ to w_0
    Output Format: $[e_{ijk}]$ where $i \leftarrow 0$ to h_1, $j \leftarrow 0$ to w_1 and $k \leftarrow 0$ to d
        ▷ Depth is an extra dimension in the output due to multiple features
    $w \leftarrow width$, $h \leftarrow height$ and $d \leftarrow depth$
    Apply Kernels on $[e_{xy}] \in [e_{ij}]$
                                        ▷ Kernels are applied on the input data
    $[e_{ij}]_0 = [w_{ij}] * [e_{ij}] + b$
        ▷ Kernels multiply weights to each element in the data and add bias
    $[e_{ijk}] \leftarrow$ **concat**$([e_{ij}]_y)$ ▷ Concatenate on z-axis
                                ▷ These outputs are represented in the output matrix
    return $[e_{ijk}]$
end procedure