Appendix B Checklist of items to include in a DL-EEG study

This section contains a checklist of items we believe DL-EEG papers should mention to ensure their published results are readily reproducible. The following items of information should all be clearly stated at one point or another in the text or supplementary materials of future DL-EEG studies:

Data

- ☐ Number of subjects (and relevant demographic data)
- ☐ Electrode montage including reference(s) (number of channels and their locations)
- ☐ Shape of one example (e.g., "256 samples $\times$ 16 channels")
- ☐ Data augmentation technique (e.g., percentage of overlap for sliding windows)
- ☐ Number of examples in training, validation and test sets

EEG processing

- ☐ Temporal filtering, if any
- ☐ Spatial filtering, if any
- ☐ Artifact handling techniques, if any
- ☐ Resampling, if any

Neural network architecture

- ☐ Architecture type
- ☐ Number of layers (consider including a diagram or table to represent the architecture)
- ☐ Number of learnable parameters

Training hyperparameters

- ☐ Parameter initialization
- ☐ Loss function
- ☐ Batch size
- ☐ Number of epochs
- ☐ Stopping criterion
- ☐ Regularization (e.g., dropout, weight decay, etc.)
- ☐ Optimization algorithm (e.g., stochastic gradient descent, Adam, RMSProp, etc.)
- ☐ Learning rate schedule and optimizer parameters
- ☐ Values of **all** hyperparameters (including random seed) for the results that are presented in the paper
- ☐ Hyperparameter search method

Performance and model comparison

- ☐ Performance metrics (e.g., f1-score, accuracy, etc.)
- ☐ Type of validation scheme (intra- vs. inter-subject, leave-one-subject-out, k-fold cross-validation, etc.)
- ☐ Description of baseline models (thorough description or reference to published work)