Supplementary Tables

Neural Network Architecture

	Optimized Hyperparameters
Neural Network Architecture (PyTorch Lightning)	● Feature Extractor: ○ ViT (patch_size = 4, dim = 128, depth = 3, heads = 8, mlp_dim = 128) ○ Output Size = 64 ● Linear Classifier: ○ Linear(98, 64) → ReLU → BatchNorm1d → Dropout ○ Linear(64, 32) → ReLU → BatchNorm1d → Dropout ○ Linear(32, 1) → Sigmoid
Model Compilation	● Optimizer: Adam ○ LR = 3e-4 ○ weight_decay = 1e-5 ● Loss: Binary Cross Entropy
Model Fitting	● Train / Val / Test (%): 80 / 10 / 10 ● Batch Size = 16 ● Class Weights: 16.13 for Rapid, 1 for Non-Rapid

Table 4. Additional in-depth description of the model architecture.