

Pipeline 1
Audio transcription
and segmentation

Pipeline 2
Audio processing

Pipeline 3
Morphosyntactic analysis

Transformations: centering, scaling

Machine Learning

DNN

Model Optimization

RF

SVM

Cross-validation

Best Model Selection

Themistocleous Charalambos, Bronte Ficek, Kimberly Webster, Dirk-Bart den Ouden, Argye E. Hillis, Kyrana Tsapkini (2021). Automatic subtyping of individuals with Primary Progressive Aphasia. Journal of Alzheimer's Disease, https://doi.org/10.3233/JAD-201101

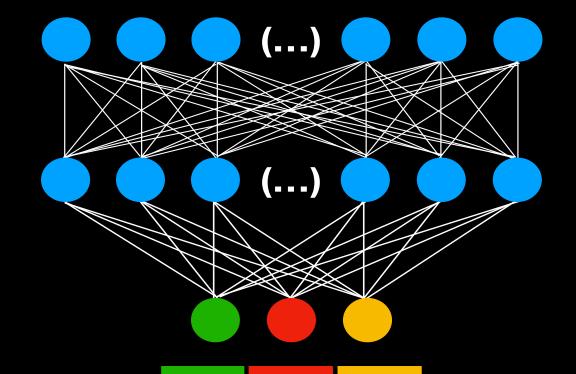
DT

	Predicted Class				
True Class					
		svPPA	IvPPA	nfvPPA	
	svPPA	64	30	6	
	IvPPA	-	95	5	
	nfvPPA	10	-	90	

Normalized confusion matrix created from the output of the Deep Neural Network. The confusion matrix provides the sum of scores from the 8-fold cross-validation test.

X input features where $X = x_1 \dots x_{40}$

	Layer No	Layer type	Units	Activation
Input	1	Dense	350	ReLu
Hidden	8	Dense	350	ReLu
Output	1	Dense	3	Softmax



IVPPA

svPPA

nfvPPA