

Supplementary Information

Appendix-1: 3D CNN Model Architecture

Layer	Output Shape	Param #
Conv3D	126, 126, 30, 32	896
LeakyReLU	126, 126, 30, 32	0
MaxPooling3D	63, 63, 15, 32	0
BatchNormalization	63, 63, 15, 32	128
Dropout	63, 63, 15, 32	0
Conv3D	61, 61, 13, 64	55,360
LeakyReLU	61, 61, 13, 64	0
MaxPooling3D	30, 30, 6, 64	0
BatchNormalization	30, 30, 6, 64	256
Dropout	30, 30, 6, 64	0
Conv3D	28, 28, 4, 64	110,656
LeakyReLU	28, 28, 4, 64	0
MaxPooling3D	14, 14, 2, 64	0
BatchNormalization	14, 14, 2, 64	256
Dropout	14, 14, 2, 64	0
Flatten	25,088	0
Dense	32	802,848
LeakyReLU	32	0
BatchNormalization	32	128
Dropout	32	0
Dense	2	64

Table A1. 3D CNN Model Architecture