

Table S3. Neonatal sleep and wake states classification results using Fluke® multiple colors palattes

Video Frame		Se%	Sp%	Ac%	P%
SVM					
AlexNet	FCL6	64.8	57.8	63.9	65.2
	FCL7	64.8	55.8	62.7	64.2
	FCL8	71.0	54.5	62.4	65.6
VGG-16	FCL6	83.2	49.0	63.2	66.6
	FCL7	80.7	46.5	61.2	64.8
	FCL8	73.5	50.9	64.1	64.6
VGG-19	FCL6	81.2	51.8	65.4	67.3
	FCL7	83.2	51.5	<b>65.6</b>	67.7
	FCL8	<b>84.8</b>	43.9	56.9	64.5
Resnet-18	FCL	70.9	47.5	59.2	62.3
InceptionV3	FCL	80.1	47.8	56.8	65.2
GoogLeNet	FCL	72.4	50.3	59.8	64.0
AlexNet	FCL6	56.5	59.3	57.4	62.9
	FCL7	62.4	54.8	58.7	62.8
	FCL8	62.7	50.0	56.3	61.3
VGG-16	FCL6	51.5	61.7	55.7	62.2
	FCL7	51.8	60.4	54.9	61.5
	FCL8	51.8	60.4	56.1	61.5
VGG-19	FCL6	69.7	48.4	57.4	62.3
	FCL7	73.6	46.1	58.1	62.5
	FCL8	71.5	43.9	59.1	60.9
Resnet-18	FCL	70.9	47.5	59.2	62.3
InceptionV3	FCL	<b>76.3</b>	48.4	63.5	64.4
GoogLeNet	FCL	70.1	51.8	60.3	64.0
AlexNet	FCL6	77.2	45.0	62.3	63.2
	FCL7	77.6	45.8	62.1	63.6
	FCL8	65.9	54.1	61.3	63.7
VGG-16	FCL6	72.9	48.4	59.9	63.3
	FCL7	63.6	51.0	56.8	61.3
	FCL8	64.8	52.4	57.7	62.4
VGG-19	FCL6	<b>81.1</b>	44.5	64.3	64.1
	FCL7	79.1	42.3	61.5	62.6
	FCL8	73.4	44.9	62.5	61.9
Resnet-18	AFCL	59.1	63.4	61.3	66.4
InceptionV3	AFCL	67.2	51.3	56.3	62.8
GoogLeNet	AFCL	78.4	44.6	59.4	63.5
AlexNet	FCL6	37.4	78.4	52.4	67.8
	FCL7	49.5	69.7	58.5	66.3
	FCL8	49.5	69.7	58.9	66.3
VGG-16	FCL6	44.4	70.7	57.6	64.7
	FCL7	41.2	74.4	59.9	66.0
	FCL8	45.9	67.1	57.6	62.7
VGG-19	FCL6	35.9	<b>87.8</b>	60.2	78.0
	FCL7	33.2	81.7	58.2	68.7
	FCL8	30.9	83.5	52.6	69.4
Resnet-18	FCL	42.4	75.5	58.9	67.6

InceptionV3		FCL	59.0	58.4	59.1	63.1
GoogLeNet		FCL	48.3	63.1	55.9	61.2
		FCL6	53.4	58.4	55.3	61.1
AlexNet		FCL7	56.9	56.9	56.8	61.7
		FCL8	60.1	55.6	58.3	62.3
		FCL6	45.4	71.7	56.6	63.7
VGG-16		FCL7	41.2	73.4	58.9	65.0
	Grayscale	FCL8	50.9	68.1	58.6	63.7
		FCL6	51.9	64.6	56.7	64.2
VGG-19		FCL7	57.3	57.6	57.1	62.1
		FCL8	61.7	55.3	57.9	62.2
Resnet-18		FCL	66.9	48.5	60.2	61.4
InceptionV3		FCL	70.4	45.9	59.1	61.4
GoogLeNet		FCL	<b>73.0</b>	43.0	57.3	61.0