

Distracted Driving Project Outline

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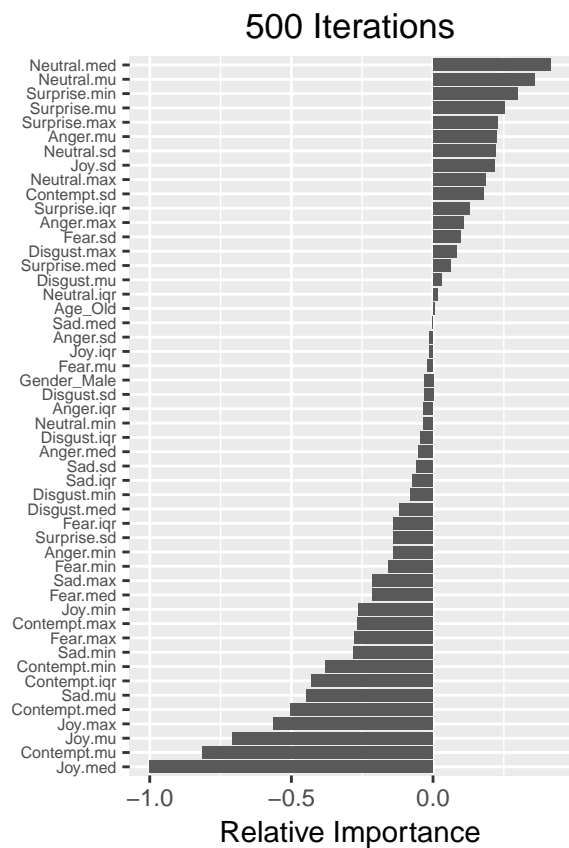
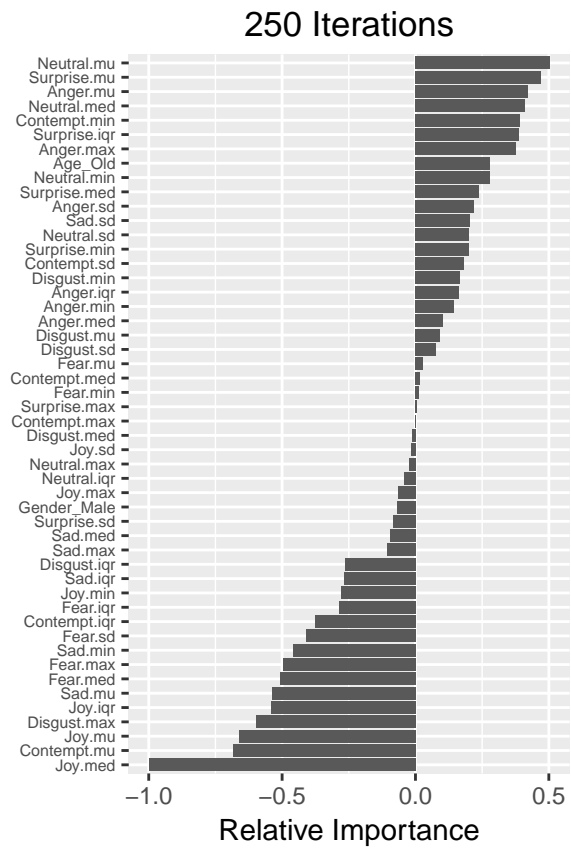
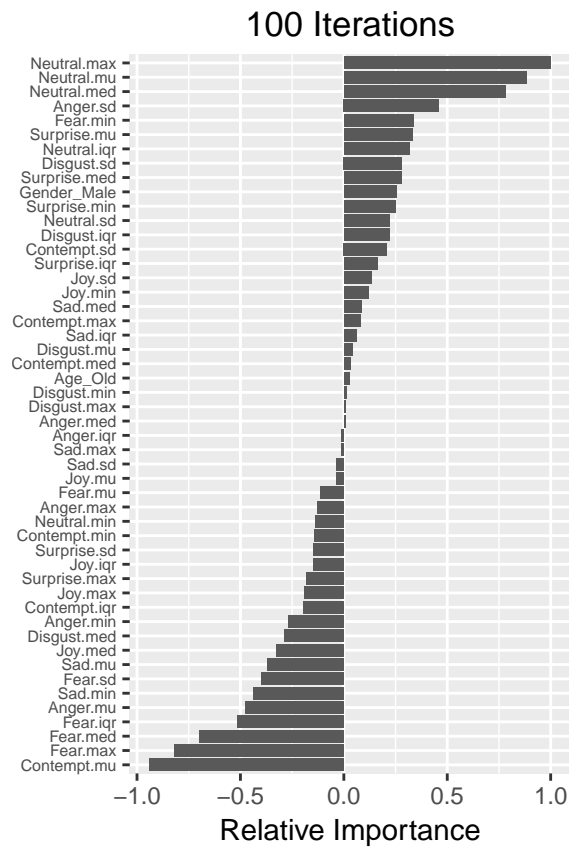
Model Training Update

Model	Data Processing	Data Split	MaxItr	Converged	Size	Decay	Training	Testing
Model 1:	Original	365 Split	100	No	50	.20	.760	.676
Model 2:	Original	Entire Sim	100	No	50	.20	.754	.754
Model 3:	Differencing	365 Split	100	Yes	10	.00	.518	.516
Model 4:	Differencing	Entire Sim	100	Yes	25	.10	.572	.571
Model 5:	Moving Avg	365 Split	100	Yes	10	.00	.503	.502
Model 6:	Moving Avg	Entire Sim	100	Yes	10	.00	.528	.528
Model 7:	1/2 Sec Cut	365 Split	100	Yes	50	.10	.820	.698
Model 8:	1/2 Sec Cut	Entire Sim	100	Yes	50	.20	.788	.779
Model 9:	1/2 Sec Diff	365 Split	100	Yes	50	.10	.716	.647
Model 10:	1/2 Sec Diff	Entire Sim	100	Yes	50	.20	.682	.622
Model 11:	1/2 Sec Cut Stat	365 Split	100	Yes	50	.10	.846	.716
Model 12:	1/2 Sec Cut Stat	Entire Sim	100	Yes	50	.20	.820	.803

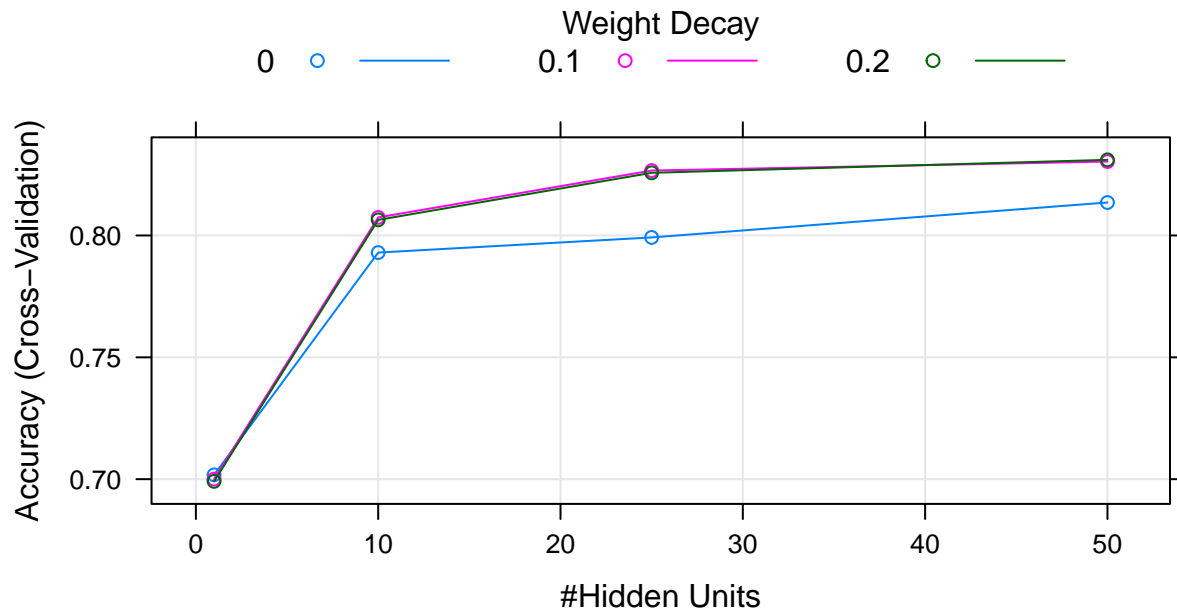
Continued Further Training Best Models

Model	Data Processing	Data Split	MaxItr	Converged	Size	Decay	Training	Testing
Model 2:	Original	Entire Sim	250	No	50	.10	.782	.781
Model 2:	Original	Entire Sim	500	No	50	.00	.796	.794
Model 8:	1/2 Sec Cut	Entire Sim	250	Yes	50	.10	.816	.804
Model 8:	1/2 Sec Cut	Entire Sim	500	Yes	50	.10	.828	.810
Model 12:	1/2 Sec Cut Stat	Entire Sim	250	Yes	50	.10	.858	.823
Model 12:	1/2 Sec Cut Stat	Entire Sim	500	Yes	50	.20	.864	.823

Variable Importance



Training Plot



Data

Model 08 Data

```
[1] "Subject"      "Age_Old"      "Gender_Male"  "Texting"      "Time"
[6] "Anger"         "Contempt"     "Disgust"      "Fear"          "Joy"
[11] "Sad"           "Surprise"     "Neutral"
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Model 12 Data

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[1] "Subject"      "Age_Old"      "Gender_Male"  "Texting"
[5] "Time"         "Anger.mu"     "Anger.sd"     "Anger.min"
[9] "Anger.max"    "Anger.med"    "Anger.iqr"    "Contempt.mu"
[13] "Contempt.sd"  "Contempt.min" "Contempt.max" "Contempt.med"
[17] "Contempt.iqr" "Disgust.mu"   "Disgust.sd"   "Disgust.min"
[21] "Disgust.max"  "Disgust.med"  "Disgust.iqr"  "Fear.mu"
[25] "Fear.sd"      "Fear.min"    "Fear.max"     "Fear.med"
[29] "Fear.iqr"     "Joy.mu"       "Joy.sd"       "Joy.min"
[33] "Joy.max"      "Joy.med"     "Joy.iqr"      "Sad.mu"
[37] "Sad.sd"       "Sad.min"     "Sad.max"      "Sad.med"
[41] "Sad.iqr"      "Surprise.mu"  "Surprise.sd"  "Surprise.min"
[45] "Surprise.max" "Surprise.med" "Surprise.iqr" "Neutral.mu"
[49] "Neutral.sd"   "Neutral.min"  "Neutral.max"  "Neutral.med"
[53] "Neutral.iqr"
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Demographic Effects (Model 08)

Variable	Neutral	Surprise	Anger	Disgust	Fear	Sad	Joy	Conten
Age	.	**	***	***	***		***	*
Gender	***	***			**		***	.
Age*Gender	***		***	*			.	***
Emotion*Age		**	.	***	***	***	***	**
Emotion*Gender	***				***	***	*	
Emotion*Age*Gender			*	***	***	***		**

Significance: [. p-value < .1] [* p-value <.05] [** p-value < .01] [*** p-value < .001]