Log File

Experiment Number	*Parameters Chosen*	*Results*
1	LSTM RNN: **Layers**: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Epochs**: 20 **Train/Test Split**: 90/10 **AA**: False **Resample**: hour/sum **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 100,401	**Epoch 20/20**: loss = .0089, val_loss = .0061 **Train RMSE**: 37.88 **Train R^2**: 0.517 **Test RMSE**: 30.64 **Test R^2**: 0.478
2	LSTM RNN: **Layers**: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Train/Test Split**: 90/10 **AA**: True **Resample**: hour/sum **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 101,201	**Epoch 20/20**: loss = .0089, val_loss = .0061 **Train RMSE**: 37.929 **Train R^2**: 0.515 **Test RMSE**: 30.54 **Test R^2**: 0.4816
3	LSTM RNN: **Layers**: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Epochs**: 20 **Train/Test Split**: 80/10 **AA**: False **Resample**: hour/sum **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 100,401	**Epoch 20/20**: loss = .0091, val_loss = .0076 **Train RMSE**: 38.25 **Train R^2**: 0.528 **Test RMSE**: 34.055 **Test R^2**: 0.385
4	LSTM RNN: **Layers**: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Epochs**: 20 **Train/Test Split**: 90/10 **AA**: False **Resample**: hour/mean **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 100,401	**Epoch 20/20**: loss = .0091, val_loss = .0063 **Train RMSE**: 0.6304 **Train R^2**: 0.5185 **Test RMSE**: 0.5101 **Test R^2**: .4792
5	LSTM RNN: **Layers**: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Epochs**: 20 **Train/Test Split**: 90/10 **AA**: False **Resample**: day/mean **Train On**: 1296 Samples **Validate On**: 145 Samples **Total Params**: 100,401	**Epoch 20/20**: loss = .0117, val_loss = .0066 **Train RMSE**: 0.3302 **Train R^2**: 0.3766 **Test RMSE**: 0.255 **Test R^2**: 0.4016
6	LSTM RNN:	**Epoch 50/50**: loss = .0090, val_loss =

	Layers: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Epochs**: 50 **Train/Test Split**: 90/10 **AA**: False **Resample**: hour/mean **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 100,401	.0063 **Train RMSE**: 0.6249 **Train R^2**: 0.5267 **Test RMSE**: 0.5097 **Test R^2**: 0.480
7	LSTM RNN: **Layers**: LSTM (100), Dropout(.2), LSTM(80), Dropout(.2), LSTM(80), Dropout(.2), Dense(1) **Epochs**: 20 **Train/Test Split**: 90/10 **AA**: False **Resample**: hour/mean **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 151,921	**Epoch 50/50**: loss = .0089, val_loss = .0063 **Train RMSE**: 0.6298 **Train R^2**:0.5193 **Test RMSE**: 0.5099 **Test R^2**: 0.4796
8	LSTM RNN: **Layers**: LSTM (70), Dropout(.2), LSTM(40), Dropout(.2), Dense(1) **Epochs**: 50 **Train/Test Split**: 90/10 **AA**: False **Resample**: hour/mean **Train On**: 31129 Samples **Validate On**: 3459 Samples **Total Params**: 39,081	**Epoch 50/50**: loss = .0090, val_loss = .0063 **Train RMSE**: 0.6224 **Train R^2**: 0.5305 **Test RMSE**: 0.5089 **Test R^2**:0.4815