Script 1. **Neural nets_Total reading time_JMP Pro 14:**

```
names default to here(1);

dt=Current Data Table();

dtb=New Table( "training_Total reading time",
	Add Rows( 0 ),
	New Column( "StringColBox",
		Character,
		"Nominal"
	)
);

dtc=New Table( "validation_Total reading time",
	Add Rows( 0 ),
	New Column( "StringColBox",
		Character,
		"Nominal"
	)
);

dtd = New Table("rank_DRI_Total reading time",
   Add Rows( 0 ),
	New Column( "Column",
		Character,
		"Nominal"
	),
	New Column( "Main Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	),
	New Column( "Total Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	)
);

dte = New Table("rank_IRI_Total reading time",
   Add Rows( 0 ),
	New Column( "Column",
		Character,
		"Nominal"
	),
	New Column( "Main Effect",
```

```
			Numeric,
			"Continuous",
			Format( "Best", 12 ),
			Set Selected,
			Set Values( [] )
		),
		New Column( "Total Effect",
			Numeric,
			"Continuous",
			Format( "Best", 12 ),
			Set Selected,
			Set Values( [] )
		)
);

dtf = New Table("rank_IUI_Total reading time",
   Add Rows( 0 ),
		New Column( "Column",
			Character,
			"Nominal"
		),
		New Column( "Main Effect",
			Numeric,
			"Continuous",
			Format( "Best", 12 ),
			Set Selected,
			Set Values( [] )
		),
		New Column( "Total Effect",
			Numeric,
			"Continuous",
			Format( "Best", 12 ),
			Set Selected,
			Set Values( [] )
		)
);

for (i=1, i<=1000, i++,

dt<<Make Validation Column(
		Training Set( 0.90 ),
		Validation Set( 0.10 ),
		Test Set( 0.00 ),
		Formula Random
);

obj=dt<<Neural(
		Y( :Std Mean_DWELL_TIME),
		X(
			:Std wl,
			:Std cvq,
```

```
                :Std sonscore,
                :Std on,
                :Std odc,
                :Std logf,
                :Std hfn
        ),
        Informative Missing( 0 ),
        Validation( :Validation ),
        Fit(
                NTanH( 3 ),
                Number of Tours( 10 ),
                N Boost( 10 ),
                Profiler(
                        1,
                        Confidence Intervals( 1 ),
                        Dependent Resampled Inputs( 1 ),
                        Independent Resampled Inputs( 1 ),
                        Independent Uniform Inputs( 1 ),
                        Reorder X Variables(
                                :Std wl,
                                :Std on,
                                :Std logf,
                                :Std cvq,
                                :Std odc,
                                :Std sonscore,
                                :Std hfn
                        ),
                        Term Value(
                                Std wl( 0, Lock( 0 ), Show( 1 ) ),
                                Std cvq( 0, Lock( 0 ), Show( 1 ) ),
                                Std sonscore( 0, Lock( 0 ), Show( 1 ) ),
                                Std odc( 0, Lock( 0 ), Show( 1 ) ),
                                Std on( 0, Lock( 0 ), Show( 1 ) ),
                                Std logf( 0, Lock( 0 ), Show( 1 ) ),
                                Std hfn( 0, Lock( 0 ), Show( 1 ) )
                        )
                )
        ),
    , invisible
);

objq=report(obj);
sumFit=objq[tablebox(1)];
dt1=sumfit<<make into data table();
dt1<<set name("Summary of fit "||char(i));
dt1<<new column("Iteration",formula(i));
dtb << Concatenate( dt1, "Append to first table" );
close(dt1, nosave);

objr=report(obj);
sumFit=objr[tablebox(2)];
```

```
dt2=sumfit<<make into data table();
dt2<<set name("Summary of fit "||char(i));
dt2<<new column("Iteration",formula(i));
dtc << Concatenate( dt2, "Append to first table" );
close(dt2, nosave);

objs=report(obj);
summary=objs[tablebox(3)];
dt3=summary<<make into data table();
dt3<<set name("Summary report "||char(i));
dt3<<new column("Iteration",formula(i));
dtd << Concatenate( dt3, "Append to first table" );
close(dt3, nosave);

objt=report(obj);
summary=objs[tablebox(4)];
dt4=summary<<make into data table();
dt4<<set name("Summary report "||char(i));
dt4<<new column("Iteration",formula(i));
dte << Concatenate( dt4, "Append to first table" );
close(dt4, nosave);

obju=report(obj);
summary=objs[tablebox(5)];
dt5=summary<<make into data table();
dt5<<set name("Summary report "||char(i));
dt5<<new column("Iteration",formula(i));
dtf << Concatenate( dt5, "Append to first table" );
close(dt5, nosave);

dt:Validation << Set Selected;
dt << Delete Columns();
);
```

Script 2. **Bootstrap forests_Total reading time_JMP Pro 14:**

```
names default to here(1);

dt=Current Data Table();

dtc=New Table( "Model fit_Total reading time",
	Add Rows( 0 ),
	New Column( "StringColBox",
		Character,
		"Nominal"
	)
);

dtd = New Table("rank_DRI_Total reading time",
   Add Rows( 0 ),
	New Column( "Column",
		Character,
		"Nominal"
	),
	New Column( "Main Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	),
	New Column( "Total Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	)
);
dte = New Table("rank_IUI_Total reading time",
   Add Rows( 0 ),
	New Column( "Column",
		Character,
		"Nominal"
	),
	New Column( "Main Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	),
	New Column( "Total Effect",
		Numeric,
		"Continuous",
```

```
                Format( "Best", 12 ),
                Set Selected,
                Set Values( [] )
        )
);

dtf = New Table("rank_IRI_Total reading time",
   Add Rows( 0 ),
        New Column( "Column",
                Character,
                "Nominal"
        ),
        New Column( "Main Effect",
                Numeric,
                "Continuous",
                Format( "Best", 12 ),
                Set Selected,
                Set Values( [] )
        ),
        New Column( "Total Effect",
                Numeric,
                "Continuous",
                Format( "Best", 12 ),
                Set Selected,
                Set Values( [] )
        )
);

for (i=1, i<=1000, i++,

dt<<Make Validation Column(
        Training Set( 0.90 ),
        Validation Set( 0.10 ),
        Test Set( 0.00 ),
        Formula Random
);

obj=dt<<Partition(
        Y( :Std Mean_DWELL_TIME ),
        X(
                :Std wl,
                :Std cvq,
                :Std sonscore,
                :Std on,
                :Std logf,
                :Std odc,
                :Std hfn
        ),
        Validation( :Validation ),
        Method( "Bootstrap Forest" ),
        Portion Bootstrap( 1 ),
```

```
		Number Terms( 3 ),
		Number Trees( 100 ),
		Go,
		Profiler(
			1,
			Dependent Resampled Inputs( 1 ),
			Independent Uniform Inputs( 1 ),
			Independent Resampled Inputs( 1 ),
			Arrange in Rows( 4 ),
			Reorder X Variables(
				:Std logf,
				:Std on,
				:Std wl,
				:Std odc,
				:Std cvq,
				:Std sonscore,
				:Std hfn
			),
			Term Value(
				Std wl( 0, Lock( 0 ), Show( 1 ) ),
				Std cvq( 0, Lock( 0 ), Show( 1 ) ),
				Std sonscore( 0, Lock( 0 ), Show( 1 ) ),
				Std on( 0, Lock( 0 ), Show( 1 ) ),
				Std logf( 0, Lock( 0 ), Show( 1 ) ),
				Std odc( 0, Lock( 0 ), Show( 1 ) ),
				Std hfn( 0, Lock( 0 ), Show( 1 ) )
			)
		),
		, invisible
);

objr=report(obj);
sumFit=objr[tablebox(2)];
dt2=sumfit<<make into data table();
dt2<<set name("Summary of fit "||char(i));
dt2<<new column("Iteration",formula(i));
dtc << Concatenate( dt2, "Append to first table" );
close(dt2, nosave);

objs=report(obj);
summary=objs[tablebox(5)];
dt3=summary<<make into data table();
dt3<<set name("Summary report "||char(i));
dt3<<new column("Iteration",formula(i));
dtd << Concatenate( dt3, "Append to first table" );
close(dt3, nosave);

objt=report(obj);
summary=objs[tablebox(6)];
dt4=summary<<make into data table();
dt4<<set name("Summary report "||char(i));
```

```
dt4<<new column("Iteration",formula(i));
dte << Concatenate( dt4, "Append to first table" );
close(dt4, nosave);

obju=report(obj);
summary=objs[tablebox(7)];
dt5=summary<<make into data table();
dt5<<set name("Summary report "||char(i));
dt5<<new column("Iteration",formula(i));
dtf << Concatenate( dt5, "Append to first table" );
close(dt5, nosave);

dt:Validation << Set Selected;
dt << Delete Columns();
);
```

Script 3. **Standard least squares_Total reading time_JMP Pro 14:**

```
names default to here(1);

dt=Current Data Table();

dtc=New Table( "Crossvalidation table_Total reading time",
	Add Rows( 0 ),
	New Column( "RSquare",
		Numeric,
		"Continuous",
		Format( "Fixed Dec", 12, 4 ),
		Set Selected,
		Set Values( [] )
	),
	New Column( "RASE",
		Numeric,
		"Continuous",
		Format( "Fixed Dec", 12, 5 ),
		Set Selected,
		Set Values( [] )
	),
	New Column( "Freq",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	)
);

dtd = New Table("Summary report_Total reading time",
   Add Rows( 0 ),
	New Column( "Column",
		Character,
		"Nominal"
	),
	New Column( "Main Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	),
	New Column( "Total Effect",
		Numeric,
		"Continuous",
		Format( "Best", 12 ),
		Set Selected,
		Set Values( [] )
	)
```

```
);

dth = New Table("Parameter Estimates_Total reading time",
   Add Rows( 0 ),
         New Column( "Term",
                  Character,
                  "Nominal"
         ),
         New Column( "Estimate",
                  Numeric,
                  "Continuous",
                  Format( "Best", 12 ),
                  Set Selected,
                  Set Values( [] )
         )
);
dte = New Table("rank_IRI_Total reading time",
   Add Rows( 0 ),
         New Column( "Column",
                  Character,
                  "Nominal"
         ),
         New Column( "Main Effect",
                  Numeric,
                  "Continuous",
                  Format( "Best", 12 ),
                  Set Selected,
                  Set Values( [] )
         ),
         New Column( "Total Effect",
                  Numeric,
                  "Continuous",
                  Format( "Best", 12 ),
                  Set Selected,
                  Set Values( [] )
         )
);

dtf = New Table("rank_IUI_Total reading time",
   Add Rows( 0 ),
         New Column( "Column",
                  Character,
                  "Nominal"
         ),
         New Column( "Main Effect",
                  Numeric,
                  "Continuous",
                  Format( "Best", 12 ),
                  Set Selected,
                  Set Values( [] )
         ),
```

```
		New Column( "Total Effect",
			Numeric,
			"Continuous",
			Format( "Best", 12 ),
			Set Selected,
			Set Values( [] )
		)
);

for (i=1, i<=1000, i++,

dt<<Make Validation Column(
		Training Set( 0.90 ),
		Validation Set( 0.10 ),
		Test Set( 0.00 ),
		Formula Random
);

obj=dt<<Fit Model(
		Validation( :Validation ),
		Y( :Std Mean_DWELL_TIME ),
		Effects( :Std wl,
			:Std cvq,
			:Std sonscore,
			:Std on,
			:Std logf,
			:Std odc,
			:Std hfn ),
		Personality( "Standard Least Squares" ),
		Emphasis( "Minimal Report" ),
		Run(
			Profiler(
				1,
				Confidence Intervals( 1 ),
				Dependent Resampled Inputs( 1 ),
				Independent Resampled Inputs( 1 ),
				Independent Uniform Inputs( 1 ),
				Arrange in Rows( 4 ),
				Reorder X Variables(
					:Std wl,
					:Std on,
					:Std logf,
					:Std cvq,
					:Std odc,
					:Std sonscore,
					:Std hfn
				),
				Term Value(
					Std wl( 0, Lock( 0 ), Show( 1 ) ),
					Std cvq( 0, Lock( 0 ), Show( 1 ) ),
					Std sonscore( 0, Lock( 0 ), Show( 1 ) ),
```

```
                                Std on( 0, Lock( 0 ), Show( 1 ) ),
                                Std logf( 0, Lock( 0 ), Show( 1 ) ),
                                Std odc( 0, Lock( 0 ), Show( 1 ) ),
                                Std hfn( 0, Lock( 0 ), Show( 1 ) )
                        )
                ),
                :Std meanDT << {Lack of Fit( 0 ), Plot Actual by Predicted( 1 ),
                Plot Regression( 0 ), Plot Residual by Predicted( 1 ),
                Plot Effect Leverage( 1 )}
        ),
        SendToReport( Dispatch( {}, "Model Launch", OutlineBox, {Close( 0 )} ))
        //, invisible
);

objr=report(obj);
sumFit=objr[tablebox(6)];
dt2=sumfit<<make into data table();
dt2<<set name("Summary of fit "||char(i));
dt2<<new column("Iteration",formula(i));
dtc << Concatenate( dt2, "Append to first table" );
close(dt2, nosave);

objs=report(obj);
summary=objs[tablebox(7)];
dt3=summary<<make into data table();
dt3<<set name("Summary report "||char(i));
dt3<<new column("Iteration",formula(i));
dtd << Concatenate( dt3, "Append to first table" );
close(dt3, nosave);

objv=report(obj);
summary=objv[tablebox(4)];
dt4=summary<<make into data table();
dt4<<set name("Summary report "||char(i));
dt4<<new column("Iteration",formula(i));
dth << Concatenate( dt4, "Append to first table" );
close(dt4, nosave);

objt=report(obj);
summary=objs[tablebox(8)];
dt5=summary<<make into data table();
dt5<<set name("Summary report "||char(i));
dt5<<new column("Iteration",formula(i));
dte << Concatenate( dt5, "Append to first table" );
close(dt5, nosave);

obju=report(obj);
summary=objs[tablebox(9)];
dt6=summary<<make into data table();
dt6<<set name("Summary report "||char(i));
dt6<<new column("Iteration",formula(i));
```

```
dtf << Concatenate( dt6, "Append to first table" );
close(dt6, nosave);

dt:Validation << Set Selected;
dt << Delete Columns();
);
```