

```

vgg = NetModel["VGG-16 Trained on ImageNet Competition Data"];

In[21]:= folderName =
  "/Users/Anatoly/Documents/OneDrive/Documents/Personal/Projects/For Yves/fast.
  ai/";

In[40]:= fileNames = FileNameJoin[{folderName, #}] & @
  {"164807-horses-horse.jpg", "brown_horse.jpg",
   "Megelli_Sports_motorcycle.jpg", "Moto_Guzzi_Italian_motorcycle.jpg"};

In[43]:= imageSet = Import /@ fileNames

```



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In[46]:= vgg[imageSet]

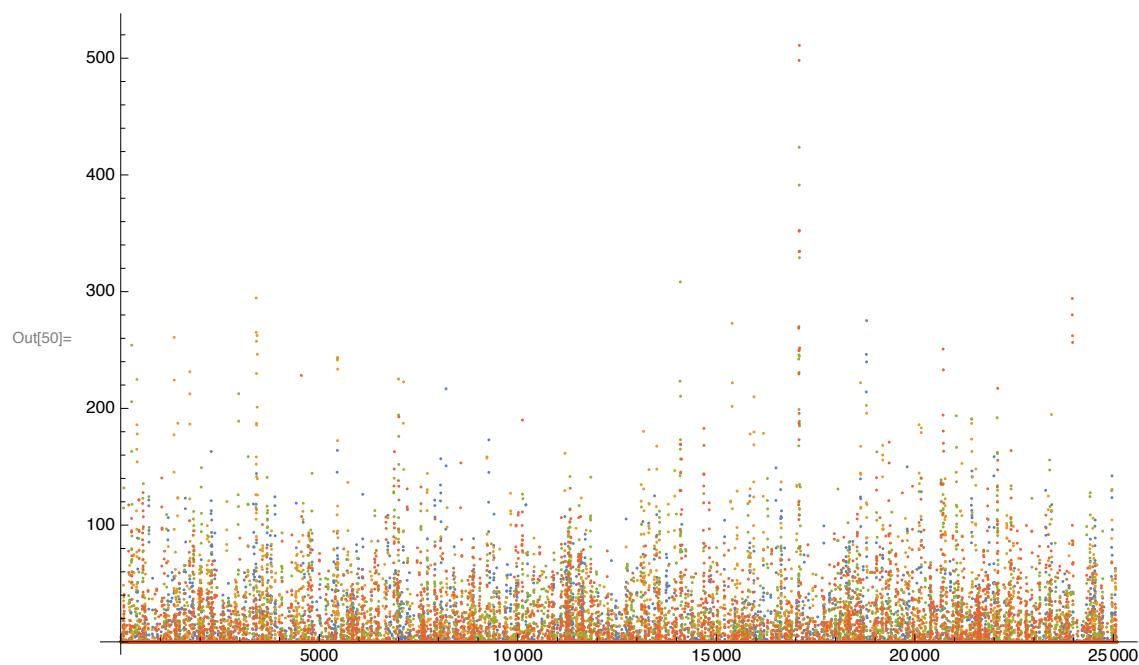
Out[46]= { Rhodesian ridgeback , sorrel , moped , moped }

In[47]:= outputLayers = {"flatten_0", "relu6", "relu7", "fc8"};
In[47]:= featureNet = Take[vgg, {1, outputLayers[[1]]}];

In[49]:= features = featureNet[imageSet];

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In[50]:= ListPlot[features]
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In[51]:= dm = DistanceMatrix[features]
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```
Out[51]= {{0., 2663.1, 3028.89, 3135.7}, {2663.1, 0., 3461.6, 3549.93},  
{3028.89, 3461.6, 0., 2466.73}, {3135.7, 3549.93, 2466.73, 0.}}
```

```
In[52]:= dm // MatrixForm
```

```
Out[52]//MatrixForm=
```

$$\begin{pmatrix} 0. & 2663.1 & 3028.89 & 3135.7 \\ 2663.1 & 0. & 3461.6 & 3549.93 \\ 3028.89 & 3461.6 & 0. & 2466.73 \\ 3135.7 & 3549.93 & 2466.73 & 0. \end{pmatrix}$$