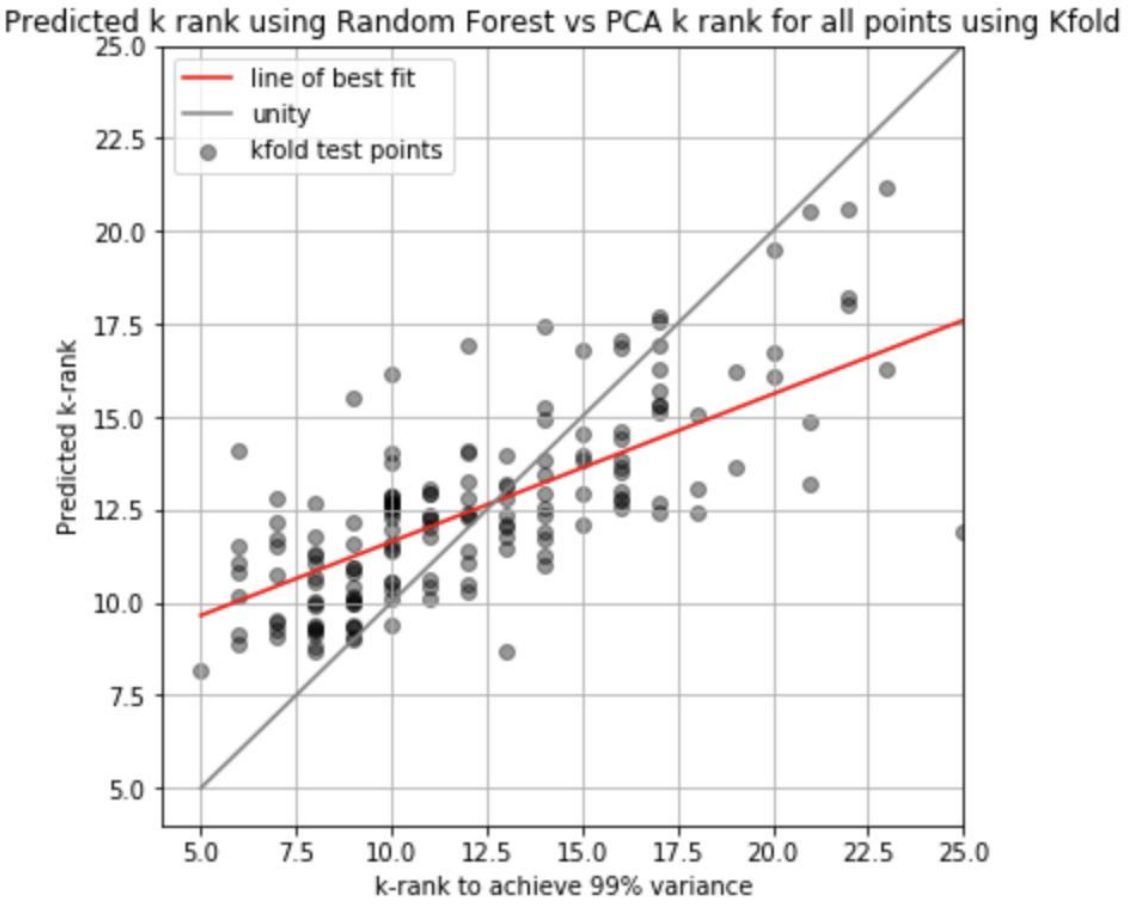
Feature importance for RandomForest (information gain for each feature, therefore, su m to 1):

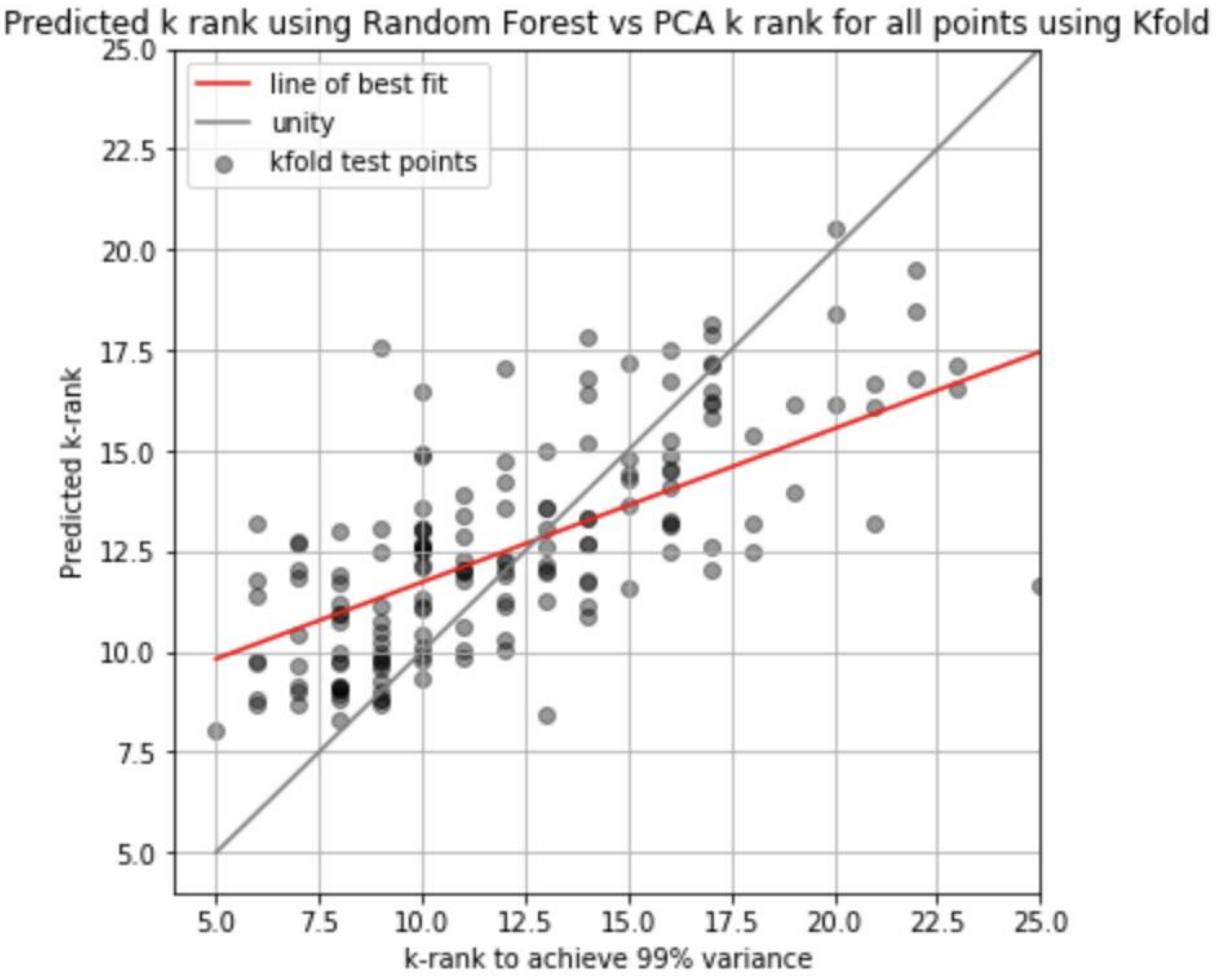
```
{'binned_complexity': 0.12,
 'horizontal_complexity': 0.08,
 'length_soma': 0.03,
 'avg_length_dendrite': 0.03,
 'avg_length_axon': 0.01,
 'total_length_dendrite': 0.03,
 'total_length_axon': 0.01,
 'length_dendrite_var': 0.03,
 'length_axon_var': 0.01,
 'count_axon': 0.01,
 'count_dendrite': 0.0,
 'avg_diameter_dendrite': 0.01,
 'avg_diameter_axon': 0.03,
 'var_diameter_dendrite': 0.03,
 'var_diameter_axon': 0.0,
 'm_type': 0.23,
 'e_type': 0.34,
 'level': 0.0}
```



R2 = 0.52

Feature importance for RandomForest removing m_type and layers:

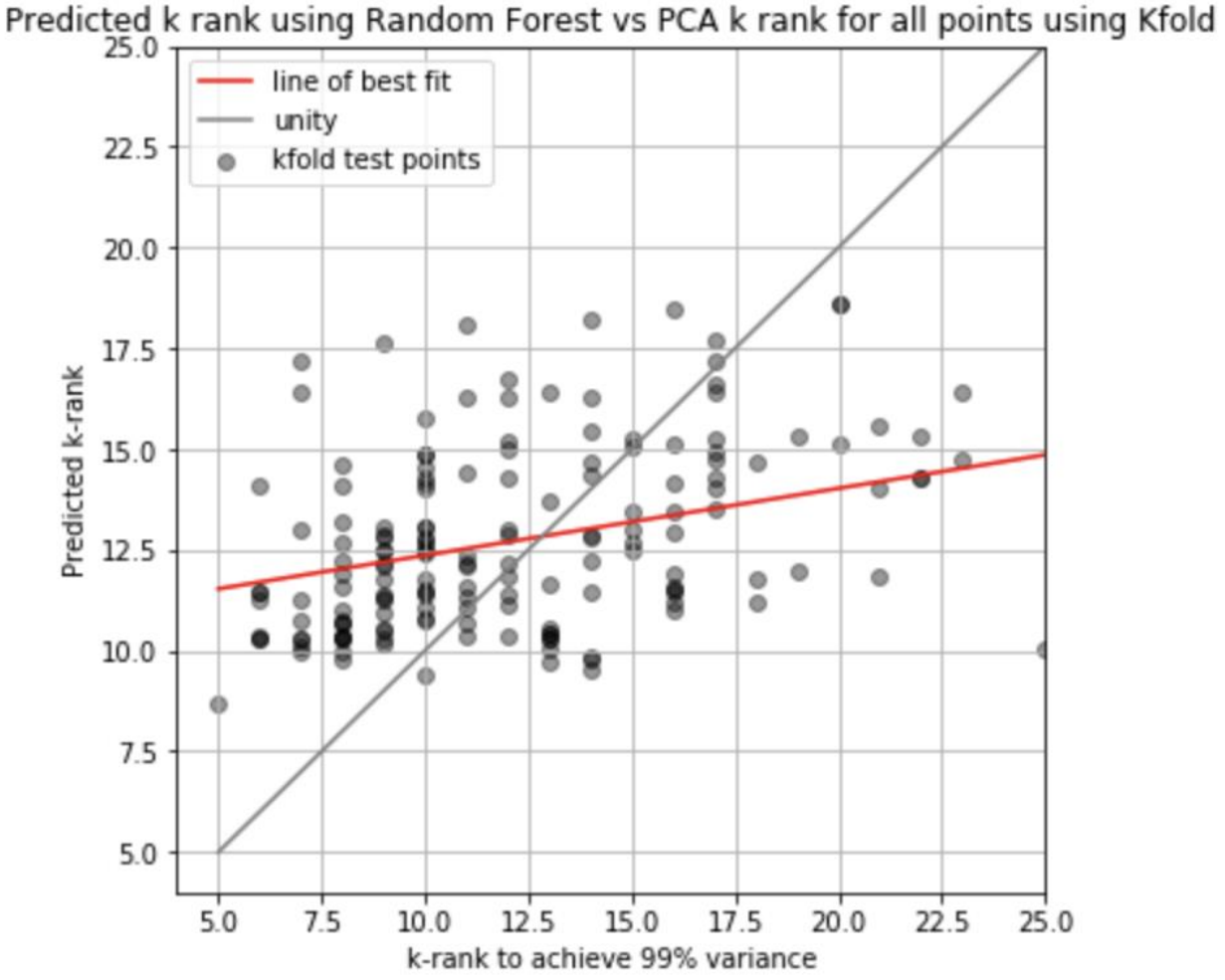
```
{'binned_complexity': 0.16,
 'horizontal_complexity': 0.12,
 'length_soma': 0.04,
 'avg_length_dendrite': 0.03,
 'avg_length_axon': 0.01,
 'total_length_dendrite': 0.03,
 'total_length_axon': 0.01,
 'length_dendrite_var': 0.03,
 'length_axon_var': 0.01,
 'count_axon': 0.01,
 'count_dendrite': 0.01,
 'avg_diameter_dendrite': 0.01,
 'avg_diameter_axon': 0.04,
 'var_diameter_dendrite': 0.03,
 'var_diameter_axon': 0.01,
 'e_type': 0.45}
```



R2 = 0.485

Feature importance for RandomForest removing m_type and e_type and layers:

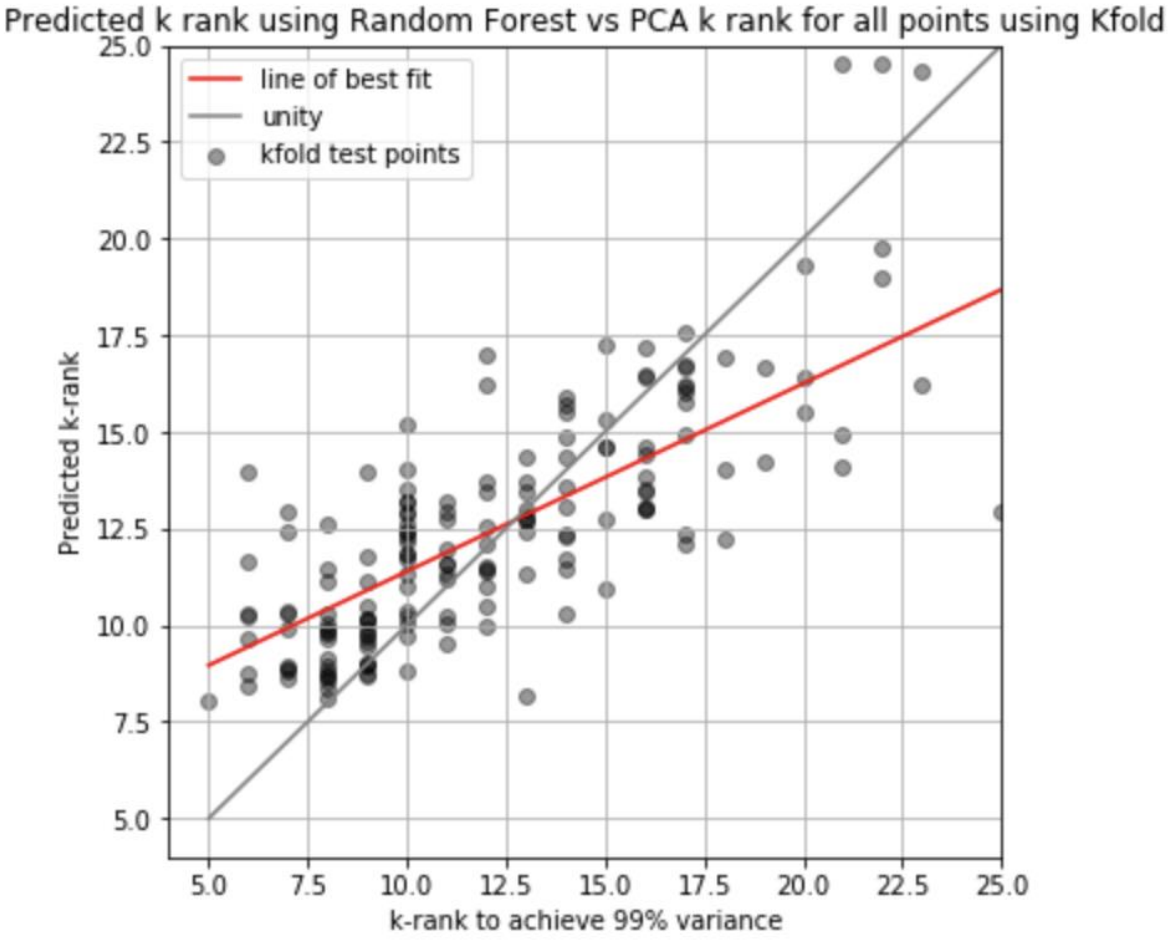
```
{'binned_complexity': 0.32,
 'horizontal_complexity': 0.29,
 'length_soma': 0.06,
 'avg_length_dendrite': 0.04,
 'avg_length_axon': 0.02,
 'total_length_dendrite': 0.05,
 'total_length_axon': 0.02,
 'length_dendrite_var': 0.05,
 'length_axon_var': 0.02,
 'count_axon': 0.02,
 'count_dendrite': 0.01,
 'avg_diameter_dendrite': 0.01,
 'avg_diameter_axon': 0.06,
 'var_diameter_dendrite': 0.05,
 'var_diameter_axon': 0.01}
```



R2 = 0.15

Choosing only feature provided by Lasso

```
{'binned_complexity': 0.13,
 'length_soma': 0.03,
 'avg_length_dendrite': 0.04,
 'avg_length_axon': 0.01,
 'total_length_dendrite': 0.05,
 'length_axon_var': 0.01,
 'avg_diameter_axon': 0.03,
 'var_diameter_axon': 0.0,
 'm_type': 0.26,
 'e_type': 0.43,}
```

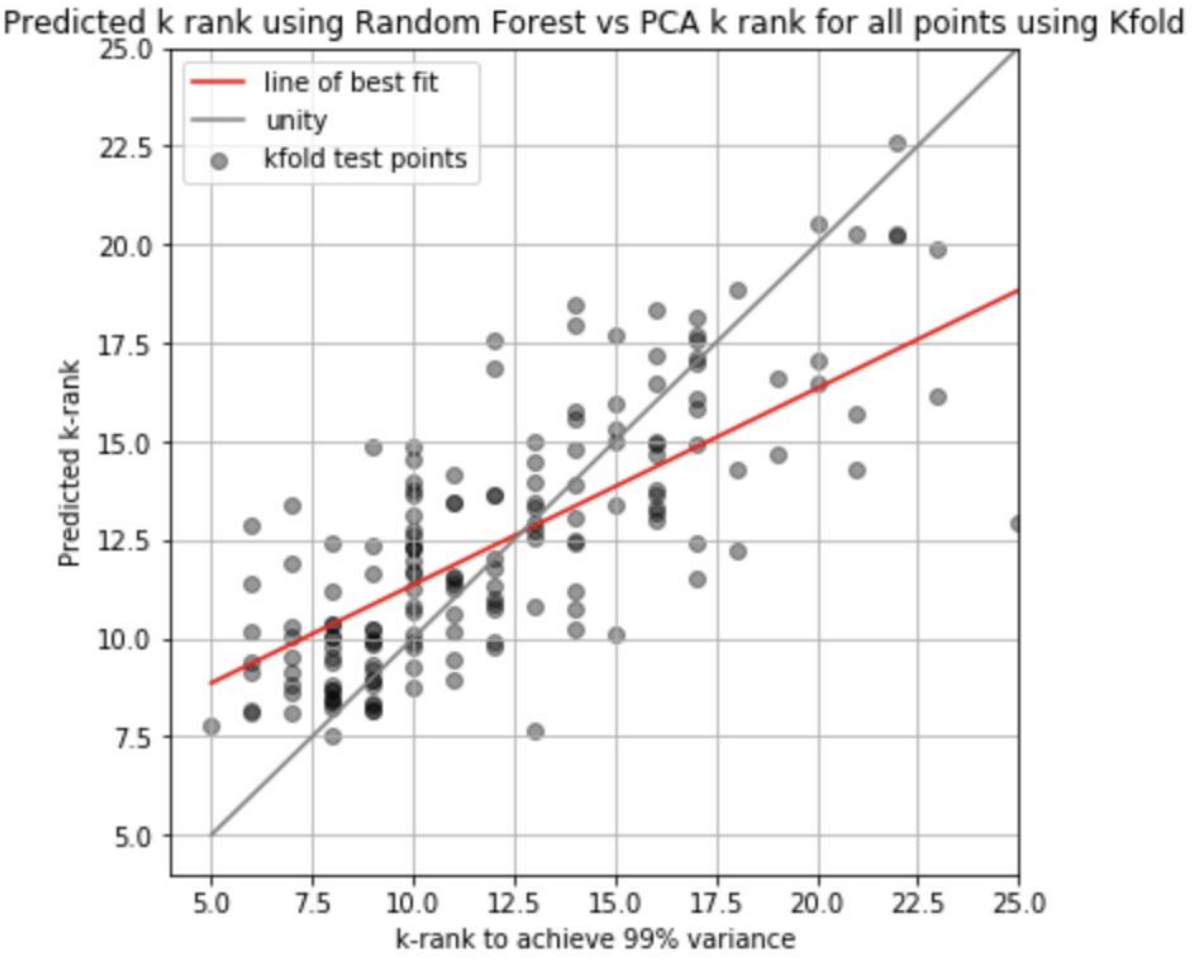


R2= 0.598

Removing M-type from Lasso features

Feature importance

```
{'binned_complexity': 0.19,
 'length_soma': 0.04,
 'avg_length_dendrite': 0.04,
 'avg_length_axon': 0.01,
 'total_length_dendrite': 0.05,
 'length_axon_var': 0.01,
 'avg_diameter_axon': 0.05,
 'var_diameter_axon': 0.01,
 'e_type': 0.61}
```

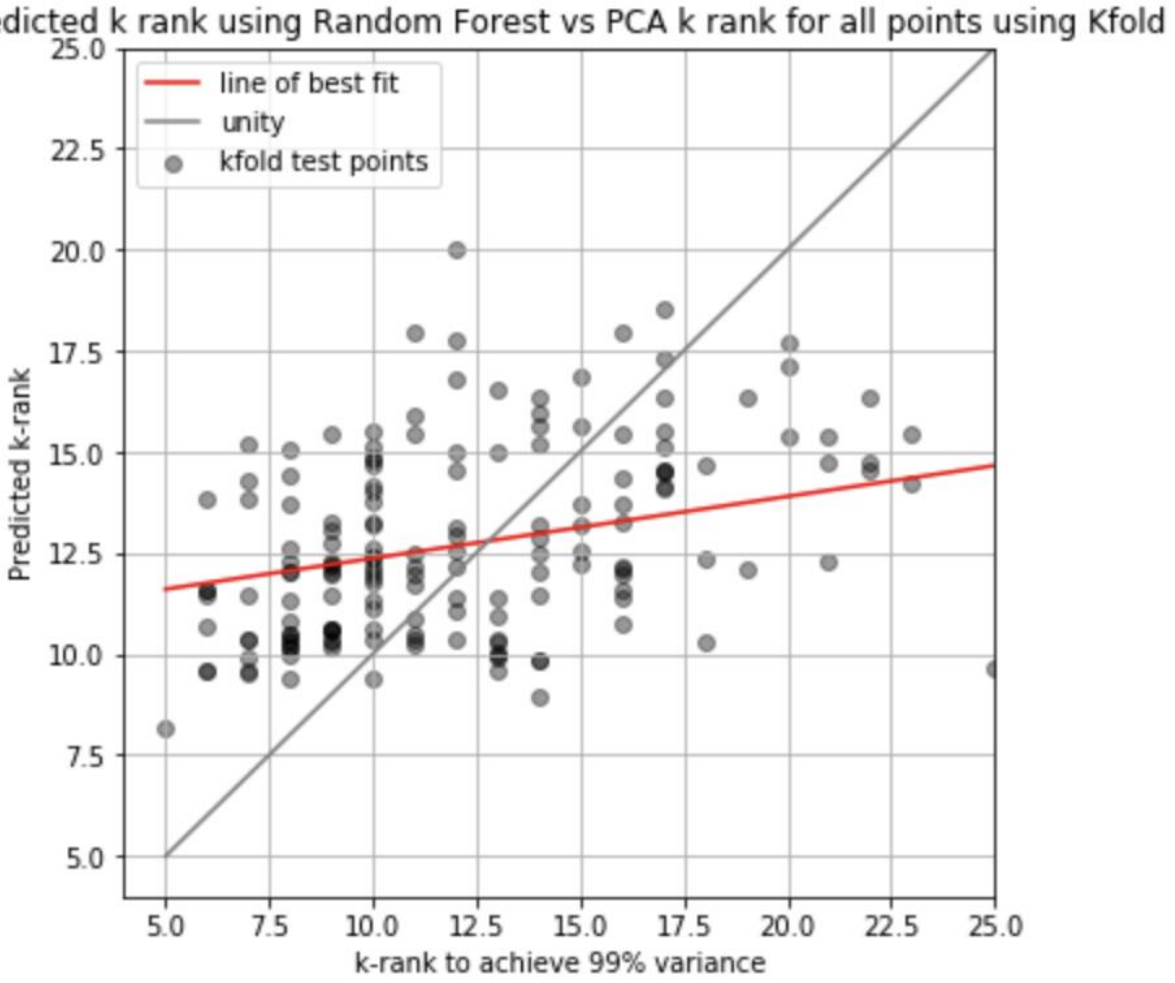


R2= 0.593

Removing M-type and E-type from Lasso features

Feature importance

```
{'binned_complexity': 0.58,
 'length_soma': 0.1,
 'avg_length_dendrite': 0.07,
 'avg_length_axon': 0.02,
 'total_length_dendrite': 0.08,
 'length_axon_var': 0.02,
 'avg_diameter_axon': 0.1,
 'var_diameter_axon': 0.01}
```



R2 = 0.12