|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Topológia | Počet epóch | Spôsob učenia | Úspešnosť trénovacia | Úspešnosť testovacia | Čas trénovania |
| **10,1** | **200** | **Resilient backpropagation** | **1-0.21** | **0.64** | **2m** |
| 10,1 | 200 | BroydenFletcherGoldfarbShanno (BFGS) | 1-0.22 | 0.64 | 11m |
| 10,1 | 200 | Conjugate gradient algorithm | 1-0.24 | 0.59 | 15m |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Topológia | Počet epóch | Learning rate | Úspešnosť trénovacia | Úspešnosť testovacia |
| **10,1** | **200** | **0.07** | **1-0.21** | **0.64** |
| 10,1 | 200 | 0.1 | 1-0.22 | 0.62 |
| 10,1 | 200 | 0.5 | 1-0.21 | 0.63 |
| 10,1 | 200 | 0.9 | 1-0.22 | 0.62 |
| 10,1 | 200 | 0.01 | 1-0.22 | 0.63 |
| 10,1 | 200 | 0.05 | 1-0.22 | 0.62 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Topológia | Počet epóch | Learning rate | Úspešnosť trénovacia | Úspešnosť testovacia |
| 10,1 | 500 | 0.07 | 1-0.21 | 0.64 |
| **10,1** | **200** | **0.07** | **1-0.21** | **0.64** |
| 10,1 | 50 | 0.07 | 1-0.23 | 0.62 |
| 10,10,1 | 200 | 0.07 | 1-0.21 | 0.63 |
| 10,10,10,1 | 200 | 0.07 | 1-0.20 | 0.64 |
| 20,1 | 200 | 0.07 | 1-0.21 | 0.64 |
| 5,1 | 200 | 0.07 | 1-0.22 | 0.63 |

Hore uvedené je pre kombináciu 1.

Kombinácia 1:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

**Ďalšie kombinácie:**

Kombinácia 2:

**'common\_link\_ratio\_1'**,  
**'common\_link\_ratio\_2'**,

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.64 |

Kombinácia 3:  
**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'has\_domain\_link'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.63 |

Kombinácia 3:  
**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'has\_long\_links'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.63 |

Kombinácia\_4:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'parametrized\_link\_ratio'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.64 |

Kombinácia\_5:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.63 |

Kombinácia\_6:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.63 |

Kombinácia\_7:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.24 | 0.55 |

Kombinácia\_8:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06*

**'iframe\_ratio'**, *# 0.19*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.23 | 0.59 |

Kombinácia\_9:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06*

**'iframe\_ratio'**, *# 0.19*

**'avg\_link\_word\_count'**,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.23 | 0.60 |

Kombinácia\_10:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.23 | 0.60 |

Kombinácia\_11:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'has\_domain\_link'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.22 | 0.61 |

Kombinácia\_12:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'has\_domain\_link'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.22 | 0.61 |

Kombinácia\_13:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'has\_domain\_link'**,  
**'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.22 | 0.62 |

Kombinácia\_14:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'has\_domain\_link'**,  
**'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.22 | 0.60 |

Kombinácia\_16:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'has\_domain\_link'**,  
**'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

**'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.22 | 0.60 |

Kombinácia\_17:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'avg\_link\_word\_count'**,  
**'has\_domain\_link'**,  
**'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.62 |

Kombinácia\_18:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'parametrized\_link\_ratio'**,  
**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'spelling\_errors\_ratio'**, *# -0.06***'common\_link\_ratio\_1'**,  
**'common\_link\_ratio\_2'**,  
**'has\_domain\_link'**,  
**'has\_long\_links'**,  
**'parametrized\_link\_ratio'**,  
**'avg\_link\_word\_count'**,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.64 |

Kombinácia\_20:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19***'parametrized\_link\_ratio'**,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.58 |

Kombinácia\_20:

**'common\_link\_ratio\_3'**, *# 0.11***'compression\_ratio'**, *# 0.06***'iframe\_ratio'**, *# 0.19*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.59 |

Kombinácia\_21:

**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.619 |

Kombinácia\_21:

**'html\_ratio'**, *# 0.05***'image\_ratio'**, *# 0.04***'hyperlink\_text\_ratio'**, *# -0.17***'raw\_text\_character\_count'**, *# 0.1***'link\_count'**, *# 0.08***'parametrized\_link\_ratio'**,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 10,1 | 200 | 0.07 | 1-0.21 | 0.62 |

--- zaver – dokopy je moznosti vyberu atributov pre 5 miestny vyber– (16 5) = 133 hodin

Jeden atribut pokial sa prida do istej kombinacie, tak je uspesnost lepsia, a pokial sa prida do druhej, tak je uspesnost horsia – dokaz je v poslednych 4roch kombinaciach,, parameter **'parametrized\_link\_ratio'**

Cim viac parametrov sa tu naondi, tym lepsie to dokaze klasifikovat – **jediny zaver**