

Czech Technical University in Prague Faculty of Nuclear Sciences and Physical Engineering

General Framework for Classicifcation at the Top

Dissertation



Author: Ing. Václav Mácha Academic year: 2021/2022

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Čestné prohlášení:

Prohlašuji na tomto místě, že jsem předloženou práci vypracoval samostatně, a že jsem uvedl veškerou použitou literaturu.

V Praze dne 1. prosince 2021	
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	Ing Václay Mácha

Název: Title title title title title

Autor: Ing. Václav Mácha

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Introduction

Many binary classification problems focus on separating the dataset by a linear hyperplane $\mathbf{w}^{\top}\mathbf{x} - t$. A sample \mathbf{x} is deemed to be positive or relevant (depending on the application) if its score $\mathbf{w}^{\top}\mathbf{x}$ is above a threshold t. Multiple problem categories belong to this framework:

Theorem 1.1

Theorem theore

Definition 1.2

Definition definition

1.1 Ranking Problems

[1, 2]

Definition 1.3

Definition definition

1.2 Accuracy At the Top

1.3 Hypothesis Testing

Theorem 1.4

Theorem theore

Proof:

Proof of theorem 1.4:

Linear Classification at the Top

3

Non-Linear Classification at the Top

Bibliography

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