



Czech Technical University in Prague
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General Framework for Classification at the Top

Dissertation



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Poděkování:

Thanks thanks thanks thanks thanks thanks thanks thanks thanks thanks thanks
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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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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:

1.1 Ranking Problems

1.2 Accuracy At the Top

1.3 Hypothesis Testing

Linear Binary Classification at The Top

Non-Linear Binary Classification at The Top via Dual Formulation
