

UNIVERSITAT POLITÈCNICA DE CATALUNYA

FACULTAT D'INFORMÀTICA DE BARCELONA

GEP — Deliverable 1

*GEP tutor:* Andujar Larios

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# Analysis of the SVM-RFE algorithm for feature selection

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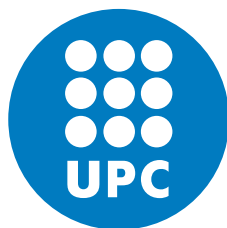
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## Chapter 1

# Context and scope

### 1.1 Context

In the world of data science, ...

### 1.2 State of the art

Some some some.

### 1.3 Objective

Explore methods to improve on the existing SVM-RFE algorithm. Such methods can be divided in either methods that improve on the SVM utilization or methods that improve on the recursive feature elimination strategy.

For the first category we will explore ways to use non-linear kernels in order to improve the candidates, in particular the use of RFK kernel.

On the second category well explore options such as using results from previous iterations, and using subsets of data for optimization purposes.

### 1.4 Methodology

Some some some

### 1.5 Scope

L<sup>A</sup>T<sub>E</sub>X is not a WYSIWYG (What You See is What You Get) program, unlike word processors such as Microsoft Word or Apple's Pages. Instead, a document written for L<sup>A</sup>T<sub>E</sub>X is actually a simple, plain text file that contains *no formatting*. You tell L<sup>A</sup>T<sub>E</sub>X how you want the formatting in the finished document by writing in simple commands amongst the text, for example, if I want to use *italic text for emphasis*, I write the `\emph{text}` command and put the text I want in italics in between the curly braces. This means that L<sup>A</sup>T<sub>E</sub>X is a "mark-up" language, very much like HTML.

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