

Research practice I

Research proposal

Title

Juan S. Cárdenas[†] and Andrés Sicard^{‡*}
jscardenareafit.edu.co, asr@eafit.edu.co

[†]Mathematical Engineering, Universidad EAFIT

[‡]Mathematical Science Department, School of Sciences, Universidad EAFIT

July 26, 2019

1 Problem definition

The problem must be clearly described. This description must include the main mathematical elements that the problem involves as well as its applications.

2 Objectives

2.1 General objective

This section describes the objectives of the research practice. Each objective must start with a verb. The reach of every specific objective must assume the reach of the general objective.

2.2 Specific objectives

- Specific objective 1.
- Specific objective 2.
- Specific objective 3.
- Specific objective 4.

3 State of the art

The main references related with the problem must be described in this section. This state of the art can be referred to the specific problem or application, or to the methods applied to solve it. You must not forget to include the most important papers and the most recent ones.

*Tutor

4 Justification

This section must describe the main motivations to develop the research. These motivations can be theoretical or practical, and they must be supported by citations/references. Personal and professional motivations can also be included.

5 Scope

You must describe here the main barriers or limitations of the research, as well as the main tools and other resources that you expected to use during the project execution. You must also describe the main expected results of the research.

6 Proposed methodology

Describe in this section the methods, techniques, algorithms, etc. that will be used during the project execution. Methodology used to be written as a set of general stages or phases. Some details about regular meeting with advisors or similar can be included.

7 Schedule

Summarize here the schedule

Table 1: Schedule

Activity	Weeks																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Activity 1																		
Activity 2																		
Activity 3																		
Activity 4																		
Activity 5																		

8 Budget

Universidad EAFIT provides data bases for the literature review, software licenses to implement the computer models and the required time of the tutor professor.

9 Intellectual property

According to the internal regulation on intellectual property within Universidad EAFIT, the results of this research practice are product of *Juan Sebastián Cárdenas* and *Andrés Sicard*.

In case further products, beside academic articles, that could be generated from this work, the intellectual property distribution related to them will be directed under the current regulation of this matter determined by Universidad EAFIT (2017).

References

Universidad EAFIT. 2017. *Reglamento de propiedad intelectual*.