Universitat Politècnica de Catalunya
Facultat d'Informàtica de Barcelona
Escola Tècnica Superior d'Enginyeria de Telecomunicació de Barcelona
Facultat de Matemàtiques i Estadística

Degree in Data Science and Engineering

Bachelor's Degree Thesis

This is the long title with a line skip

Author's full name

Supervised by (name of the supervisor/s of the TFG)
Department (or Institution if not UPC)
Ponent: nom del ponent si n'hi ha

Month, year

Thanks to...

Abstract

This should be an abstract in english, up to 1000 characters.

Keywords

keyword1, keyword2, keyword3, ...

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This report should contain the following information (you can rename the sections):

Contents

1. Introduction

The acoustic quality of a space is essential to gurantee an optimal sound expirience. This project aims to develop a Python program capable of analysis acoustic parameters such as frequency response, phase, delay, RT60 and others.

Using a speaker-microphone configuration, the system will allow to automatic correction on the output signal using equalisation.

1.1 Prueba 1

1.1.1 Otra Prueba

2. State of the art

3. Goals of the project

Objectius

4. Proposed solution / Tasks

4.1 Review basic concepts of acoustics analysis and correction

4.2 Implementation of acoustic analysis

4.3 Implemnetation of acoustic correction

4.4 Integration of a monitoring mechanism

4.5 Validation and testing of the system

5. Results

6. Conclusions

Biblography

See comments below

Appendix

See comments below

Comments on Figures

Please include figures using the graphics package uploaded. Fancy options can be found for example in

`http://www.kwasan.kyoto-u.ac.jp/solarb6/usinggraphicx.pdf`

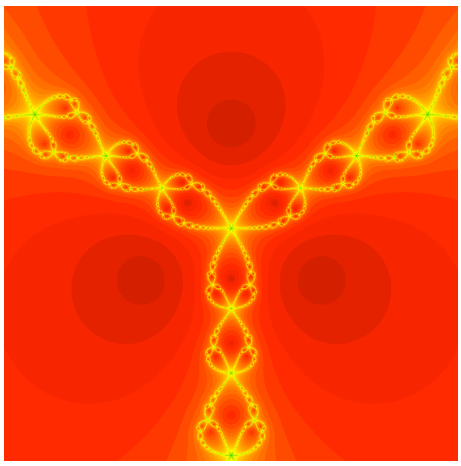

Figure 1: The caption of this figure is "Newton's method of a cubic polynomial".

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By default, the following packages are uploaded:

(1) `enumerate`: It allows you to make list with specific somehow arbitrary labels, like this one.

(2) `amsthm`: To make evironments with different styles.

(3) `amsmath,amssymb,amsfonts`: Multiple mathematics symbols and fonts.

(4) `graphicx`: To include figures in a simple and intuitive way.

(5) `amscd`: To make commutative diagram with horizontal and vertical arrows. See below.

(6) `xy`: To make really fancy commutative arrows. See below.

(7) `booktabs`: To make fancy tables.

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References

[AY03] S.K. Agrawal and J. Yan, *A three-wheel vehicle with expanding wheels: differential flatness, trajectory planning, and control*, Proc. of the 2003 IEEWRSJ, Intl. Conference on Intelligen Robots and Systems (2003).

[Mue02] S Mueller, *Transfer-function measurement with sweeps director ' s cut including previously unreleased material*, 2002.

A. Title of the appendix

You can include here an appendix with details that can not be included in the core of the document. You should reference the sections in this appendix in the core document.

B. Title of the appendix

Second appendix.