UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH
Escola Tècnica Superior d'Enginyeria
de Telecomunicació de Barcelona

Face recognise using a GPU

Master Thesis
submitted to the Faculty of the
Escola Tècnica d'Enginyeria de Telecomunicació de Barcelona
Universitat Politècnica de Catalunya
by

Student Name

In partial fulfillment
of the requirements for the master in
(Write the name of your Master) **ENGINEERING**

Advisor: name of the advisor
Barcelona, Date XXXXX

Contents

Barcelona, Date XXXXX

List of Figures

Listings

List of Tables

Revision history and approval record

Revision	Date	Purpose
0	dd/mm/yyyy	Document creation
1	dd/mm/yyyy	Document revision

DOCUMENT DISTRIBUTION LIST

Name	e-mail
[Student name]	
[Project Supervisor 1]	
[Project Supervisor 2]	

Written by:		Reviewed and approved by:	
Date	dd/mm/yyyy	Date	dd/mm/yyyy
Name	Xxxxxxx yyyyyyy	Name	Zzzzzzz Wwwwwww
Position	Project Author	Position	Project Supervisor

Abstract

Every copy of the thesis must have an abstract. An abstract must provide a concise summary of the thesis. In style, the abstract should be a miniature version of the thesis: short introduction, a summary of the results, conclusions or main arguments presented in the thesis. The abstract may not exceed 150 words for a Degree's thesis.

1 Introduction

An Introduction that clearly states the rationale of the thesis that includes:

1. Statement of purpose (objectives).
2. Requirements and specifications.
3. Methods and procedures, citing if this work is a continuation of another project or it uses applications, algorithms, software or hardware previously developed by other authors.
4. Work plan with tasks, milestones and a Gantt diagram.
5. Description of the deviations from the initial plan and incidences that may have occurred.

The minimum chapters that this thesis document should have are described below, nevertheless they can have different names and more chapters can be added.

1.1 Gantt Diagram

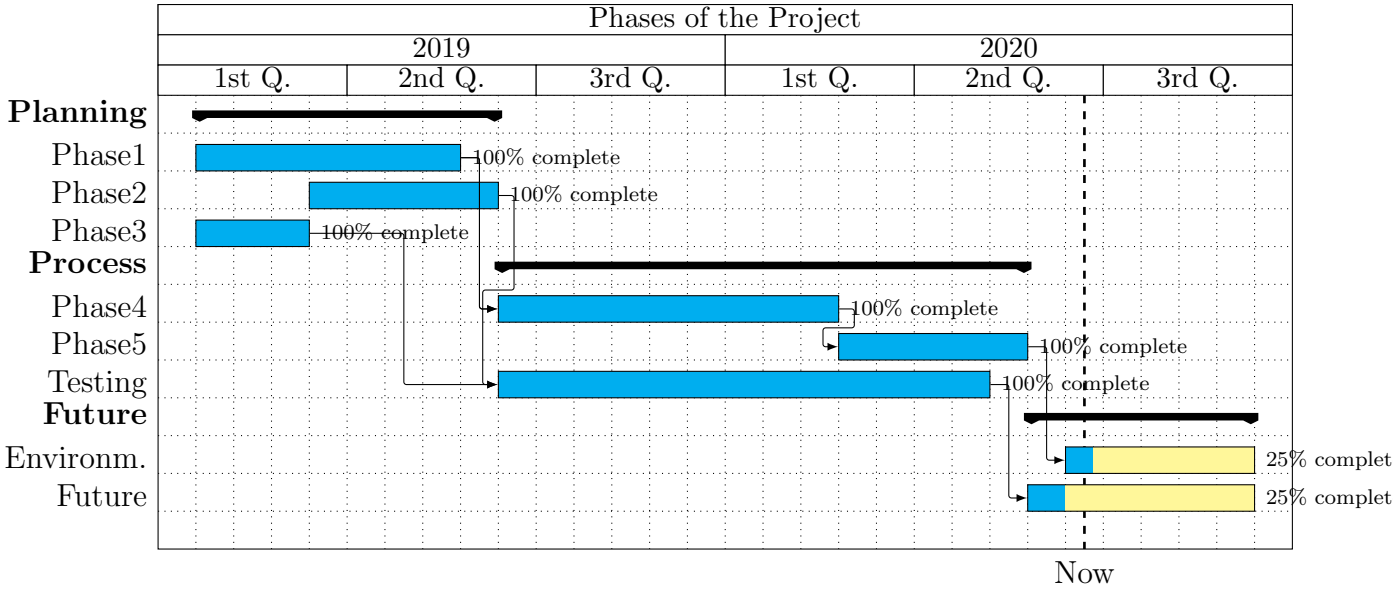

Figure 1: Gantt diagram of the project

For more information read the manual [**?**] of Skala.

1.2 Topic

2 State of the art of the technology used or applied in this thesis:

A background, comprehensive review of the literature is required. This is known as the Review of Literature and should include relevant, recent research that has been done on the subject matter.

2.1 Topic

Here you have a couple of references about LaTeX [?] and electrodynamics [?].

2.2 Topic

3 Methodology / project development:

The Methodology is included in this chapter and should include all relevant methods that were utilized as well as research methods and measurements, software and hardware development, ...

4 Results

This should include your data analysis and findings

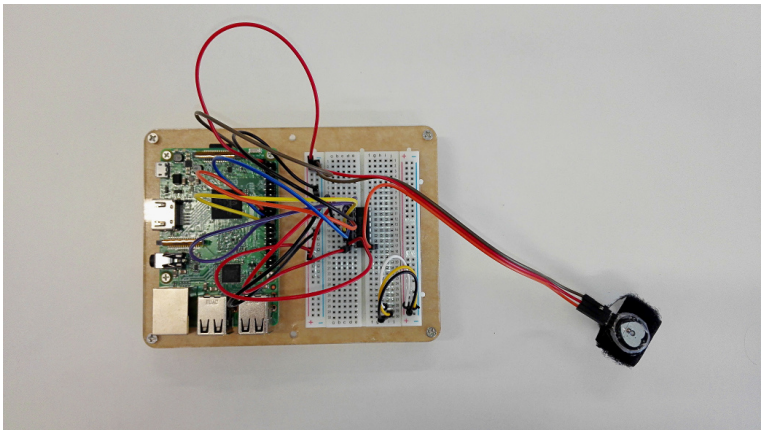

Figure 2: Prototype setup.

Table 1: This is the other caption. Since the trial size of the experiments showed is one second, the number of *Target* and *Impostor* data corresponds to number of trials or seconds

Dataset	**Label**	**Train**	**Validation**	**Develop**	**Test**
First	Target	135	45	30	30
	Impostor	5,220	1,740	1,890	2,880
	#Subjects		31		12
Second	Target	144	80	48	48
	Impostor	2,014	1,119	1,343	1,545
	#Subjects		15		5

Algorithm 1 Temperature-Distributed algorithm

procedure TEMP-SPREAD($GN_i, HN_j, temperatures$) ▷ Lowest temperature priority
  $temperature\_list \leftarrow short(temperatures)$
  $max_temperature \leftarrow max(temperature_list)$
  $ThresHold \leftarrow 0.5$
  $temperature\_impact \leftarrow 0.2$
  for GN_i in $i = 1, 8$ **do** ▷ Iterate every hardware node on the given GN
    $it\_temperature \leftarrow temperature\_list(GN_i)$
    $temp\_weight \leftarrow \frac{max\_temperature - it\_temperature}{max\_temperature} * temperature\_impact$
    $\omega(Master - GN_i) \leftarrow ThresHold * temp\_weight$
    for HN_j in $j = 1, n$ **do**
      if $available\_accel_{i,j} > busy\_accel_{i,j}$ **then**
        $policy_\omega = \frac{AvailableHW}{TotalHW} * ThresHold$
        $\omega(GN_i - HN_{i,j}) \leftarrow ThresHold + policy_\omega$
      else
        $\omega(GN_i - HN_{i,j}) \leftarrow 1$
  $node \leftarrow find\_djistra\_shortest\_path(Master\_Node, aux\_node)$
  $returnnode\ b$ ▷ The gcd is b

5 Budget

Depending on the thesis scope this document should include:

6 Environment Impact (Optional)

Whether the tasks that have led to the realization of this thesis, as if its results have identifiable environmental impact, describe it in this section.

7 Conclusions and future development:

This should include your summary, conclusions and recommendations.

Appendices

Appendices may be included in your thesis but it is not a requirement.