



POLITECNICO DI MILANO
DEPARTMENT OF ELECTRONICS, INFORMATION AND
BIOENGINEERING
DOCTORAL PROGRAMME IN COMPUTER SCIENCE

DEEP LEARNING FOR STRUCTURED PREDICTION

Doctoral Dissertation of:
Francesco Visin

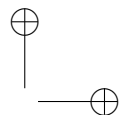
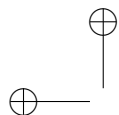
Supervisor:
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Co-Supervisor:
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Tutor:
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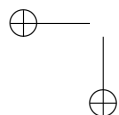
The Chair of the Doctoral Program:
Prof. Coordinator Name

2016 – XXVIII

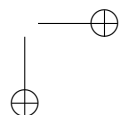


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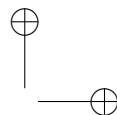
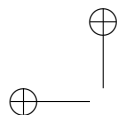


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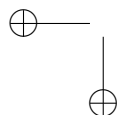
Abstract

ABSTRACT goes here.

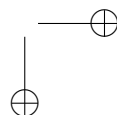


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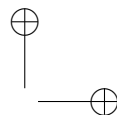
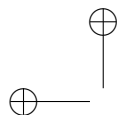


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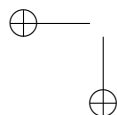
Summary

SUMMARY goes here.

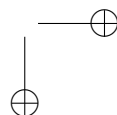


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CHAPTER *1*

Introduction

1.1 Introduction

Remember that wherever you want you can cite with `\cite{a1}` [1], [2] and/or [3] someone. Or use `\footnote{That's a footnote}` like this¹

1.2 New section

You can insert a definition

Definition 1.2.1. *PoliMi: Politecnico di Milano*

1.3 Another section

1.3.1 And a subsection

In this sub section I will include many images just to make the list of figures meaningful.

¹That's a footnote

Chapter 1. Introduction



Figure 1.1: *Caption of this PoliMi image.*

1.4 New section

1.4.1 And also many sub

Or again more nested

- item 1
- item 2
- item 3

1.5 New section

This is an example of table. You can see it in Table 1.1.

Table 1.1: *Table caption*

Col 1 Dim C.1	Col 2 Dim C.3	Col2 Dim C.3
Data 1.1	Data 1.2	Data 1.3
Data 2.1	Data 2.2	Data 2.3
Data 3.1	Data 3.2	Data 3.3

1.6 You can do as many section as you want

The following equation has been created using $\$$: $y_1 = a * x + b$.

This is a more complex equation:

$$y_2 = a * x + b$$

, created using $\backslash [\ \backslash]$

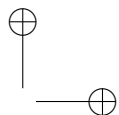
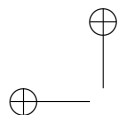
1.6. You can do as many section as you want

This is, (1.1), an enumerated equation:

$$y_3 = a * x + b \tag{1.1}$$

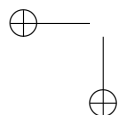
, created using:

```
\begin{equation}\label{eq:eeq1}  
  y_3 = a*x + b  
\end{equation}
```

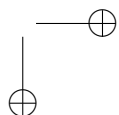


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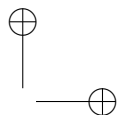


CHAPTER 2

Convolutional networks

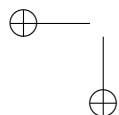
2.1 Introduction

Write something about convolutions, transposed convolutions, deconvolutions, ..

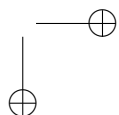


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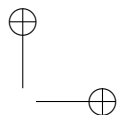
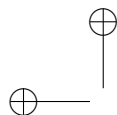


CHAPTER 3

Recurrent networks

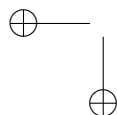
3.1 Introduction

Write something about RNNs, LSTMs, GRUs

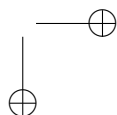


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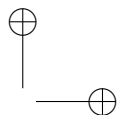
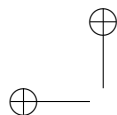


CHAPTER 4

State of the art

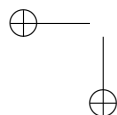
4.1 Introduction

Write something about SOTA in classification, detection, semantic segmentation, video segmentation

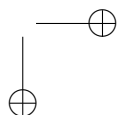


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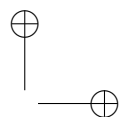
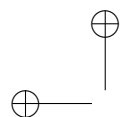


CHAPTER 5

ReNet

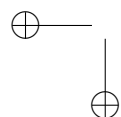
5.1 Introduction

Write something about ReNet

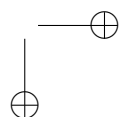


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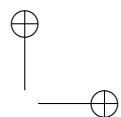
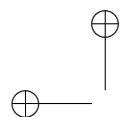


CHAPTER 6

ReSeg

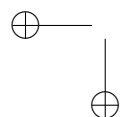
6.1 Introduction

Write something about ReSeg

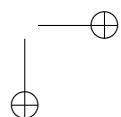


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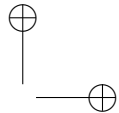
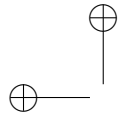


CHAPTER 7

DeconvRNN

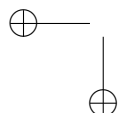
7.1 Introduction

Write something about video segmentation

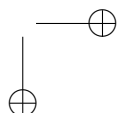


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Bibliography

- [1] Author1, Author2. Title article 1. *Journal*, 1(1):1–10, 1000.
- [2] Author1, Author2. *Title Book 1*. Publisher, 1000.
- [3] Author1, Author2. *Title Manual 1*. Organization, e.g University, 1000. available online at <http://www.microlab-mi.net>.