MOTION ESTIMATION FROM UAV's VIDEO

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Video Stabilization and Compensation Measurement for Tuning Control Parameters

AI & R Lab
Laboratorio di Intelligenza Artificiale
e Robotica del Politecnico di Milano

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A qualcuno...

Abstract

Abstract/Summary text

Acknowledgements

Thank you, thank you, thank you

Contents

Chapter 1

Introduction

1.1 Overview

L'introduzione deve essere atomica, quindi non deve contenere n\'e sottosezioni n\'e paragrafi n\'e altro. Il titolo, il sommario e l'introduzione devono sembrare delle scatole cinesi, nel senso che lette in quest'ordine devono progressivamente svelare informazioni sul contenuto per incatenare l'attenzione del lettore e indurlo a leggere l'opera fino in fondo. L'introduzione deve essere tripartita, non graficamente ma logicamente:

1.2 Inquadramento generale

La prima parte contiene una frase che spiega l'area generale dove si svolge il lavoro; una che spiega la sottoarea pi\'u specifica dove si svolge il lavoro e la terza, che dovrebbe cominciare con le seguenti parole "lo scopo della tesi \'e \dots", illustra l'obbiettivo del lavoro. Poi vi devono essere una o due frasi che contengano una breve spiegazione di cosa e come \'e stato fatto, delle attivit\'a sperimentali, dei risultati ottenuti con una valutazione e degli sviluppi futuri. La prima parte deve essere circa una facciata e mezza o due

1.3 Scope of the Thesis or Brief Description of the Work

La seconda parte deve essere una esplosione della prima e deve quindi mostrare in maniera pi\'u esplicita l'area dove si svolge il lavoro, le fonti bibliografiche pi\'u importanti su cui si fonda il lavoro in maniera sintetica (una pagina) evidenziando i lavori in letteratura che presentano attinenza con il lavoro affrontato in modo da mostrare da dove e perch\'e \`e sorta la tematica di studio. Poi si mostrano esplicitamente le realizzazioni, le direttive future di ricerca, quali sono i problemi aperti e quali quelli affrontati e si ripete lo scopo della tesi. Questa parte deve essere piena (ma non grondante come la sezione due) di citazioni bibliografiche e deve essere lunga circa 4 facciate.

1.4 Structure of the thesis

La terza parte contiene la descrizione della struttura della tesi ed \`e organizzata nel modo seguente. “La tesi \`e strutturata nel modo seguente.

Nella sezione due si mostra \dots

Nella sez. tre si illustra \dots

Nella sez. quattro si descrive \dots

Nelle conclusioni si riassumono gli scopi, le valutazioni di questi e le prospettive future \dots

Nell'appendice A si riporta \dots (Dopo ogni sezione o appendice ci vuole un punto).”

I titoli delle sezioni da 2 a M-1 sono indicativi, ma bisogna cercare di mantenere un significato equipollente nel caso si vogliano cambiare. Queste sezioni possono contenere eventuali sottosezioni.

Chapter 2

State of Art

2.1 Overview

bla bla bla bla bla bla bla bla bla bla bla bla bla PPS bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla [?]bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla, see [?].

2.2 The next section

Chapter 3

Problem Description

3.1 Overview

In questa sezione si deve descrivere l'obiettivo della ricerca, le problematiche affrontate ed eventuali definizioni preliminari nel caso la tesi sia di carattere teorico.

- Describe Objetives
- Describe Problem

3.2 Sigue el Vacile

In mathematics a projective space is a set of elements similar to the set P(V) of lines through the origin of a vector space V. The cases when V=R2 or V=R3 are the projective line and the projective plane, respectively. The idea of a projective space relates to perspective, more precisely to the way an eye or a camera projects a 3D scene to a 2D image. All points which lie on a projection line (i.e., a "line-of-sight"), intersecting with the entrance pupil of the camera, are projected onto a common image point. In this case the vector space is R3 with the camera entrance pupil at the origin and the projective space corresponds to the image points. Projective spaces can be studied as a separate field in mathematics, but are also used in various applied fields, geometry in particular. Geometric objects, such as points, lines, or planes, can be given a representation as elements in projective spaces based on homogeneous coordinates. As a result, various relations between these objects can be described in a simpler way than is possible without homogeneous coordinates. Furthermore, various statements in geometry can be made more consistent and without exceptions. For example, in the standard geometry for the plane two lines always intersect at a point except when the lines are parallel. In a projective representation of lines and points, however, such an intersection point exists even for parallel lines, and it can be computed in the same way as other intersection points. Other mathematical fields where projective spaces play a significant role are topology, the theory of Lie groups and algebraic groups, and their representation theories.

3.2.1 Esta es una subsection

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3.2.1.1 Esto ya es el colmo de la subsub

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Chapter 4

Problem Solution

4.1 Overview

- How to take the problem
- Solution

Chapter 5

Experiments and Results

5.1 Overview

bla bla bla bla bla bla bla bla bla bla bla, see **??**. Bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla DLC-coatings bla bla bla bla bla bla bla bla b[**?**]la bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla bla, see [**?**]. (**??**) is the definition of the integral sine function.

$$\int \frac{\sin(x)}{x}\, \mathrm{d}x = \mathrm{Si}(x) \tag{5.1}$$

5.2 The next section

Chapter 6

Conclusions and Further Works

6.1 Overview

bla bla bla bla bla bla bla bla bla bla bla bla bla PPS bla, see [**?**].

6.2 The next section

Appendix A

Logic Project Documentation

A.1 Overview

Documentazione del progetto logico dove si documenta il progetto logico del [?]sistema e se ‘e il caso si mostra la progettazione in grande del SW e dell’HW. Quest’appendice mostra l’architettura logica implementativa (nella Sezione 4 c’era la descrizione, qui ci vanno gli schemi a blocchi e i diagrammi).

Appendix B

User Manual

B.1 Overview

Manual

Appendix C

Results Examples

C.1 Overview

Results