ETH zürich

Distributed Monte Carlo Information Fusion and Distributed Particle Filtering

wang junjie

HIT — School of Software

Contents

1 About

2 Abstract

3 Introduction

4 Distributed MC data fusion

5 This is section two

The International Federation of Automatic Control
Cape Town, South Africa. August 24-29, 2014
Australian National University and NICTA, Canberra Research Lab

Contents

1 About

2 Abstract

3 Introduction

4 Distributed MC data fusion

5 This is section two

we present a MC solution to the distributed data fusion problem and apply it to distributed particle filter.

Contents

1 About

2 Abstract

3 Introduction

4 Distributed MC data fusion

5 This is section two

Our approach to this problem is consensus-based and involves local exchange of posterior densities.The posteriors are exchanged via sets of unweighted particles.

attractive aspects

- distributed
- robust
- has a guaranteed speed of convergence
- the resulting posterior distribution is guaranteed to be consistent as long al the dependence between the agents is understood

Hlinka, O., Hlawatsch, F., and Djuric, P.M. (2013).
Distributed particle filtering in agent networks: A survey, classification, and comparison. IEEE Signal Processing Magazine, 30(1), 61C68.

Contents

1 About

2 Abstract

3 Introduction

4 Distributed MC data fusion

5 This is section two

This is the title of the first frame

In this frame we use a block:

Title of the block

Contents of the block...
In one or more lines

- It can also include environments...
  - It can also include environments...

Contents of the block...
In one or more lines

1. It can also include environments...

This is the title of the first frame

In one or more lines

- It can also include environments...
  - It can also include environments...
- It can also include environments...
  - It can also include environments...

1. It can also include environments...

Let's use a long frame title that will be displayed in two (or more) lines... This is not a good practice, but it may happen :-)

Now lets split the presentation using columns..

In this frame we use a block:

Title of the block

Contents of the block...

In one or more lines

- It can also include environments...
  - It can also include environments...

Contents

1 About

2 Abstract

3 Introduction

4 Distributed MC data fusion

5 This is section two

Summary..