

RoboCup Rescue 2019

TDP Agent Simulation

Team Name (Country)

Author 1, Author 2, and Author 3

Affiliation, Country

[author1.email, author2.email, author3.email] (optional)

<http://web-site.url> (optional)

Abstract. This year we have some changes in TDP's structure. Each teams should obey the new structure. Therefore please take care about this change. The abstract should summarize the problem, hypotheses, methods used, results, and conclusions.

0 Very Important Note

This year we have some changes in TDP's structure. Each teams should obey the new structure. In the TDP, Teams should use significant worth references.

In Section 2 your works on several modules should be described with these sub-parts "1-summary of related scientific papers about the problems about this module, 2-What other teams did last year(not only what they said on TDP),3-what is your approach,4-provide their cons and props".

Be care about plagiarism, if a team commits plagiarism, the team and its members will be banned participating on the current and next year's RoboCup Rescue Simulation competitions. The term plagiarism comprises any use of external knowledge without proper referencing, i.e., copying or using thoughts, ideas, texts or language in general and presenting them as their own. This applies for Team Description Papers as well as team code. All kinds of licenses and copyright have to be respected. This applies to the qualification process and the RoboCup tournaments. Please be aware that when a team is found guilty of committing plagiarism it is disqualified and banned at any time. This may also be in the middle of the tournament.

You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

1 Introduction

The introduction should highlight the main issues approached by the team. The team should provide a brief overview of these issues and highlight other approaches to solve them. It is also extremely important to describe the main improvements made by the team since last year, if the team participated previously in the RoboCup Rescue Agent competition.

2 Modules

In this section, the team should describe the features and improvement implemented in the main ADF modules used by all agents like clustering, path planning and communication modules.

2.1 Clustering

Clustering module details.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

2.2 Path Planning

Path Planning module details.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

2.3 Communication

Communication module details.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

3 Strategies

In this section, the team should describe the features of the ADF modules implemented specifically to each type of agent and their main strategies. The team should remove the subsections that does not apply.

3.1 Police Office

Describe the police office target allocation implementation and strategy.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

3.2 Police Force

Describe the police force target allocation implementation and strategy.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

3.3 Ambulance Center

Describe the ambulance center target allocation implementation and strategy.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

3.4 Ambulance Team

Describe the ambulance team target allocation implementation and strategy.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

3.5 Fire Station

Describe the fire station target allocation implementation and strategy.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

3.6 Fire Brigade

Describe the fire brigade target allocation implementation and strategy.

The Problem First, Please describe and simplify the main problem of this module using a general view (The best one is generalizing the problem without using any rescue simulation concept and explain how this generalization related to the module).

Second please describe the essential things that should be considered to solve the problem.

Related Works In this part, you should provide a summary of related valuable scientific papers to this module and cite them. You can use command [1] for citing an article. Please put the BibTeX of the reference in references.bib.

Other Teams approaches In this part, you should describe other teams approaches even their approaches didn't explain in the TDP. Please summary their primary focus and the drawbacks and advantages of their work. Don't forget to cite teams' TDP.

The proposed approach In this part, you should describe your proposed approach to solve the problem. Please explain your work thoroughly.

Pros and Cons In this part, the Pros and Cons of your proposed approach should be mentioned.

4 Preliminary Results

It is highly advised to present some results of the new algorithms and strategies developed by the team using the maps from the previous year and compare the results with last year's results.

| Team | Map | | |
|---------|-------|-------|--------|
| | Kobe | Paris | Berlin |
| My Team | 44.2 | 77.12 | 23.56 |
| Team A | 30.34 | 56.78 | 1.23 |
| Team B | 45.7 | 11.8 | 70.2 |

5 Conclusions

Summarize the main contributions and conclusions, and provide some ideas for future improvements.

References

1. author1, author 2: title. In: Proceedings of 2017 RoboCup. publisher (2017)