

Indoor Localisation in 3D using Received Signal Strength Indication (RSSI)

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April 2015

Contents

| | | |
|----------|------------------------------------|----------|
| 1 | Introduction | 3 |
| 1.1 | Background | 3 |
| 2 | Theory | 4 |
| 3 | Method | 5 |
| 4 | Result | 6 |
| 5 | Related work | 7 |
| 6 | Conclusions and future work | 8 |
| 7 | Bibliography | 9 |

1 Introduction

1.1 Background

Localisation is something that's been of importance for a long time and Global Positioning System (GPS) has taken us within meters of certainty today [1]. When locating the position of a building that kind of accuracy is acceptable but it is not sufficient when it comes to localising objects indoors, when there is need to know where inside of a building something is situated. Knowledge of the location of an object in 3D and indoors could be useful, for example, in large warehouses or in emergency situations.

Several research papers proposes Indoor Positioning Systems (IPS) utilising Received Signal Strength Indication (RSSI) [2, 3, 4], a measurement of the power present in a received radio signal. RSSI is used to estimate the distance between the communicating objects, which is needed to calculate the approximated location of the subject.

2 Theory

3 Method

4 Result

5 Related work

6 Conclusions and future work

7 Bibliography

References

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