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Wireless Protection of Vulnerable Road Users

Seminar Thesis in Computer Science Master

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Wireless Protection of Vulnerable Road Users

Seminar Thesis in Computer Science Master

submitted by

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created in the Working Group

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Erklärung

Ich versichere, dass ich die Arbeit ohne fremde Hilfe und ohne Benutzung anderer als der angegebenen Quellen angefertigt habe und dass die Arbeit in gleicher oder ähnlicher Form noch keiner anderen Prüfungsbehörde vorgelegen hat und von dieser als Teil einer Prüfungsleistung angenommen wurde.
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I declare that the work is entirely my own and was produced with no assistance from third parties.
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(Philip Frerk)
Paderborn, 25. Dezember 2017

Abstract

about 1/2 page:

1. Motivation (Why do we care?)
2. Problem statement (What problem are we trying to solve?)
3. Approach (How did we go about it)
4. Results (What's the answer?)
5. Conclusion (What are the implications of the answer?)

Protecting vulnerable road users is a very important task as in roughly 50 % of all traffic accidents vulnerable road users are involved. Vulnerable road users are pedestrians or drivers of two-wheeled vehicles.

A technology is needed that warns both the vulnerable road user and the car driver if an accident between them is likely to happen. This is not an easy challenge because the warnings have to be sent in time and also it has to ensured that no people are warned who are not really affected by the approaching car.

To achieve that goal, wireless networks, GPS and sensor perception will be used.

Results show that the number of accidents with vulnerable road users involved can be reduced dramatically.

Therefore, much more work will be put into this topic, because it is already shown that the technologies can potentially prevent many traffic accidents.

Kurzfassung

Gleicher Text (sinngemäß, nicht wörtlich) in Deutsch

Contents

The table of contents should fit on one page. When in doubt, adjust the `tocdepth` counter.

Chapter 1

Introduction

1.1 Motivation

1.2 Structure of the Thesis

Chapter 2

V2P Communication Systems

Chapter 3

Detecting Pedestrians by using Perception

Hier kommt nur ein kleiner Ausblick hin, da es nicht direkt etwas mit Wireless Networking zu tun hat

Chapter 4

Fusion of Perception and V2P Communication

Chapter 5

Conclusion

- summarize again what your paper did, but now emphasize more the results, and comparisons
- write conclusions that can be drawn from the results found and the discussion presented in the paper
- future work (be very brief, explain what, but not much how, do not speculate about results or impact)
- recommended length: one page.

List of Abbreviations

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Todo list