

DEPARTMENT OF INFORMATICS

TECHNISCHE UNIVERSITÄT MÜNCHEN

Thesis type (Bachelor's Thesis in Informatics, Master's Thesis in
Robotics, ...)

Thesis title

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Titel der Abschlussarbeit

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I confirm that this thesis type (bachelor's thesis in informatics, master's thesis in robotics, ...) is my own work and I have documented all sources and material used.

Munich, Submission date

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Acknowledgments

Abstract

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1.2 Motivation

1.2.1 Show the need to explore Pervasive Computing

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2 Background & Related Work

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2.3.1 Server To Server

2.3.2 Server To Device

2.3.3 Device To Device

2.4 Explain Opportunistic networks and SCAMPI architecture

2.5 Show other approaches in the literature

3 Approach

3.1 System Model

Explain the overall architecture

3.2 Modeling of Input Sensor Data

3.2.1 Show how the different sensors have data been modeled to fit our requirements for further use in computations

3.2.2 Dealing with Resources

We cant make assumptions about resources

Resource capability description " Resource Configuration File"

Decoupling Resources

3.3 Pushing the Computation to the Edges "Nodes"

3.3.1 Execution Model

- Which nodes should execute the data, is it all, some or a specific nodes. Also, how is the model specified in the computation meta data. - How do we know if a Computational Instance has been executed or not.

Computation Meta-data

Dealing with Dependencies (Shipping, Configuring)

3.4 Moving Data

3.4.1 Explain data distribution among several nodes to apply pervasive computing

Input Meta-data

is it local, provided or collected data.

3.5 Networking

3.5.1 SCAMPI

4 Evaluation

4.1 Use Case Implementation

4.1.1 Explain why did we choose this specific use case in particular

4.1.2 Explain the Implementation

4.2 Implementation Evaluation

4.2.1 Show that the implementation is a proof of concept that the approach is sound

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5 Conclusion

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