



A few words about ISHTAR

The main objective of the **ISHTAR SSA** project is to contribute towards the harmonisation of technologies, services/applications, and standardisation efforts in the field of Location Based Services (LBS).

Moreover, the project will aim to facilitate and promote the exploitation of existing and emerging relevant expertise and practices.

One of the main reasons of the slowness of the geo-location market is the lack of harmonisation between user's expectation, available technologies, and maturity of the LBS industry.

The market is today characterized by a strong US technical dominance and the EU industries, though obviously IT competent is too spread in various heterogeneous technical solutions, preventing an EU LBS success story.

ISHTAR's objectives will enable to foster and harmonize LBS initiatives of key players, thus promoting the European excellence in the mobility domain, and helping to build a convergent solution.

The main objectives/results of the **ISHTAR** project are:

- To identify and report on knowledge and expertise gaps particularly in terms of technological interoperability in the field of LBS at European level
- Contribution to the harmonisation of LBS standardisation efforts
- To derive a pan-European map of expertise in the field of Location Based Services and relevant technologies
- To propose a five-year R&D roadmap for future R&D activities in the field

visit Us for more LBS at www.eu-ishtar.net!

Organisation

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Registration

To register please visit our website at <http://www.wpnc.net>

Registration Fees

Full Registration	200 €
Author	150 €
Student (non graduated)	50 €

Contact

Prof. Dr.-Ing. K. Jobmann
Henning Scheibner

phone: +49 (0) 511 762 2814
fax: +49 (0) 511 762 3030
e-mail: workshop2006@wpnc.net
<http://www.wpnc.net>

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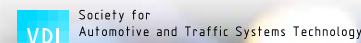
3rd Workshop on Positioning, Navigation and Communication 2006 (WPNC'06)

co-located with

1st ISHTAR Workshop

16th March 2006, right after CeBIT '06

Location: University of Hannover
Information Technology Laboratory
Schneiderberg 32
30167 Hannover, Germany



1st ISHTAR Workshop March 16th 2006, Hannover

In the context of the Specific Support Action project ISHTAR (Industrial Stimuli for the European Research in the area of Location Based Services) this workshop will focus on information for LBS services through mobile telephony.

The workshop will be split into three preliminary sessions in which you will have the opportunity to learn about the "hot spots" in LBS.

The First session will focus on the challenge LBS is facing to become part of our day-to-day life, which will include speakers from the areas of:

- LBS operators
- Positioning technologies
- Mobile OS trends
- Standardization bodies

The Second session will be focused on:

- LBS Market
- Technology status, trends and barriers
- The views of the different LBS players

And will include speakers from the areas of:

- Map providers
- Application providers
- Handheld terminal devices
- Telecoms operators

The Third and final session will be focused on current innovative LBS applications from European funded R&D projects. In this section special application fields of LBS will be presented and discussed, such as:

- Emergency response
- Day to day applications
- Mobile worker applications

In between sessions you will have the opportunity to raise questions or concerns that will lead to an open discussion.



WPRNC'10 Morning Session 09:00 - 12:15

The workshop shall give an overview of state-of-the-art approaches and systems. As many technologies are available to deal with the variety of applications, we would like to continue to cover ultra-wideband technology as it is becoming of great importance in the area of positioning, navigation and communication.

Chair:
Prof. Dr.-Ing. K. Jobmann

Welcome Speech
Prof. Dr.-Ing. K. Jobmann

Keynote Address
Prof. Dr.-Ing. T. Kaiser

UWB Geo-Regioning - Algorithm and Performance
F. Althaus, C. Steiner, A. Wittneben
Communication Technology Laboratory,
Swiss Federal Institute of Technology Zurich,
Switzerland

Performance and Accuracy Test of the WLAN Indoor Positioning System "ipos"
G. Retscher, E. Moser, D. Vredevelde, et al.
Institute of Geodesy and Geophysics,
Vienna University of Technology, Austria
IMST GmbH, Germany

Enhanced code acquisition in global positioning radio systems
F. Benedetto, G. Giunta, A. Neri, et al.
Digital Signal Processing and Multimedia
Communications Laboratory,
University of Roma, Italy
Communications and Remote Sensing Laboratory,
Université catholique de Louvain, Belgium

Pedestrian Dead Reckoning (PDR) and GPS for Indoor Positioning
S. Beauregard, H. Haas
School of Engineering and Science,
International University Bremen, Germany

A new Particle Filter Algorithm for Localization of a Mobile Base Station using Microwave Backscatter
H. Qasem, L. Reindl, C. Ament
Institute of Microsystems Technology,
Freiburg University, Germany

WPRNC'10 Poster Session 13:00 - 14:00

Chair: H. Scheibner

Replication of local road networks for regional information dissemination in VANETS - C. Bruns et al.

Low-Cost Sonic-Based Indoor Localization for Mobile Robots - D. Wehden et al.

Closer to Reality: Simulating Localization Algorithms Considering Defective Observations in Wireless Sensor Networks - F. Reichenbach et al.

Complexity Considerations for Unambiguous Acquisition of Galileo Signals - A. Burian et al.

Algorithms for Audiovisual Speaker Localisation in Reverberant Acoustic Environments - C. Voges et al.

An improved simulation model for Nakagami-m fading channels for satellite positioning applications - E. Pajala et al.

Pre-processing of Data in RSS Signature-Based Localization - C. M. Takenga et al.

The Design of Embedded GPS Navigation System Based on Internet Structure - F. Kao et al.

A Hybrid IMU/WLAN indoor positioning system - K. R. Anne et al.

On the Polarization Diversity Performance of Log.-Per. Multiarm-Antennas for MB-OFDM UWB Communications - O. Klemp et al.

Mobile Robot Localization using WLAN Signal Strengths - C. Roehring

An Optical Indoor Positioning system for the mass market - O. Maye

An Indoor Localization System Based on DTDOA for Different Wireless LAN Systems - F. Winkler et al.

Precise Positioning in Realtime using Navigation Satellites and Telecommunication - C. Daub et al.

WPRNC'10 Afternoon Session 14:00 - 16:30

Track A:

Chair: Prof. Dr.-Ing. K. Kyamakya

On Impact of Topology and Cost Function on LSE Position Determination in Wireless Networks

V. Dizdarevi, K. Witrissal
SPSC Laboratory,
Graz University of Technology, Austria

On the Applicability of Deterministic Modelling to Indoor UWB Channels

J. Jemai, P. Eggers, G. Frølund Pedersen, et al.
Institute for Communications Technology,
Braunschweig Technical University, Germany
Center for PersonKommunikation,
Aalborg University, Denmark

Indoor Positioning with UWB Beamforming

C. Senger, T. Kaiser
University of Duisburg-Essen, Germany

WLAN Indoor Positioning Based on Euclidean Distances and Fuzzy Logic

A. Teuber, B. Eissfeller
Institute of Geodesy and Navigation,
University FAF Munich, Germany

Propagation Delay Based Positioning Using IEEE 802.11b

G. Rahmatollahi, S. Galler, J. Schroeder, et al.
Institute of Communications Engineering,
University of Hannover, Germany

Track B:

Chair: Prof. Dr. techn. S. Boll

Local Positioning with Parallelepiped Moving Grid

N. Sirola, S. Ali-Löyty
Tampere University of Technology, Finland

Particle filtering of database assisted positioning estimates using a novel similarity measure for GSM signal power measurements

S. Peschke, R. Haeb-Umbach
University of Paderborn, Germany

Dynamic GPS-position Correction for Mobile Pedestrian Navigation and Orientation

J. D. Martin, J. Krösche, S. Boll
University of Oldenburg, Germany
Upper Austria University of Applied Sciences,
Hagenberg, Austria
OFFIS, Germany

Field trial on GPS Accuracy in a medium size city: The influence of built-up

M. Modsching, R. Kramer, K. ten Hagen
University of Applied Sciences Zittau/Görlitz,
Germany

Non-Cooperative Localization of 3G Mobile Terminals in Multipath Scenarios

V. Algeier, B. Demissie, W. Koch, et al.
Ilmenau University of Technology, Germany
Research Institute for Communication, Information
Processing and Ergonomics, Germany