

**Review Form: 1<sup>st</sup> International Workshop on  
Services and Infrastructure for the Ubiquitous and Mobile Internet (SIUMI'05)**



**SIUMI 2005**

**WEB MINDS**

Columbus, Ohio,  
USA, June 6<sup>th</sup>, 2005

In conjunction with the 25th Int. Conference on Distributed Computing Systems (**ICDCS'05**)

Paper Number: #13

Paper Title: Service Description for Pervasive Service Discovery

Authors: Michael S. Thompson, Scott F. Midkiff

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**Reviewer1:**

<b>Familiarity</b> Rate your familiarity with the topic	1	2	3	4	
	Novice	Some knowledge	Familiar	Expert	
<b>Significance</b> Technical relevance and practicality of ideas in the paper	1	2	3		
	Not significant	Somewhat significant	Highly significant		
<b>Novelty</b> How original the problem and/or solution method is	1	2	3		
	Not novel	Somewhat novel	Highly novel		
<b>Quality of Presentation</b> Writing and presentation style/accuracy	1	2	3		
	Poorly written	Could be improved	Well written		
<b>Overall Recommendation</b>	1	2	3	4	5
	Strong reject	Weak reject	Weak Accept	Accept	Strong accept

**Contributions**

Authors propose a novel solution for service description and a query language suitable for pervasive computing environments.

The contribution is relevant because offers a new perspective compared to the current literature.

**Strengths and weaknesses**

Strength: Address a known problem in a new way

Weakness: No Major weaknesses

**Detailed public comments**

The paper is well written and the content is sound,  
I have no recommendations to the authors.

## **Reviewer2:**

<b>Familiarity</b> Rate your familiarity with the topic	1	2	3	4X	
	Novice	Some knowledge	Familiar	<b>Expert</b>	
<b>Significance</b> Technical relevance and practicality of ideas in the paper	1	2X	3		
	Not significant	<b>Somewhat significant</b>	Highly significant		
<b>Novelty</b> How original the problem and/or solution method is	1	2X	3		
	Not novel	<b>Somewhat novel</b>	Highly novel		
<b>Quality of Presentation</b> Writing and presentation style/accuracy	1	2	3X		
	Poorly written	Could be improved	<b>Well written</b>		
<b>Overall Recommendation</b>	1	2X	3	4	5
	Strong reject	<b>Weak reject</b>	Weak accept	Accept	Strong accept

### **Contributions**

This paper proposes a novel description scheme and the related matching engine for smart discovery of pervasive services. The topic is very interesting in that service discovery in a pervasive environments, which are characterized by several (and different) technologies, seems to be a very relevant topic addressed by researchers in this field. The proposed solution is evaluated by simulation.

### **Strengths and weaknesses**

The major weakness of this paper relies in the missing related work section. Indeed many research works are been conducting on these issues. It would be very important to compare the proposed approach with other existent ones in literature. The envisioned scenarios do not comprise all the most significant usage scenarios for service discovery protocols, as described by several international research forums (Open Mobile Alliance, Wireless-world Research Forum).

Simulations seem to not to use realistic work-loads for evaluating the proposed solution. The service creation and discarding patterns are randomly generated; the usage of realistic patterns could increase the effectiveness of the described simulation significantly.

### **Detailed public comments**

The major weakness of this paper relies in the missing related work section. The Section named “related work actually provides a taxonomy of current service discovery protocols rather than a comparison between the proposed solution and the state of the art research on semantic service description and smart discovery.

The solution must be compared with at least ongoing research on semantic web and ontologies for service Description.

The authors can enhance the work significantly by adding a thorough and critical related-work section; it is crucial that the work be contextualized within current research on these hot topics. Without such a comparison, it will be difficult to understand the motivation behind the proposal of a new strategy for service description and query. The authors must convince the reader by answering effectively to the following question: “ Why you propose (yet) another strategy while there is a lot of good-quality ongoing research and development activity on applying semantic web and ontology-based descriptions to ubiquitous services?”.

**Reviewer3:**

<b>Familiarity</b> Rate your familiarity with the topic	1	<b>2X</b>		3	4
	Novice	Some knowledge		Familiar	Expert
<b>Significance</b> Technical relevance and practicality of ideas in the paper	1	2		<b>3X</b>	
	Not significant	Somewhat significant		Highly significant	
<b>Novelty</b> How original the problem and/or solution method is	1	<b>2X</b>		3	
	Not novel	Somewhat novel		Highly novel	
<b>Quality of Presentation</b> Writing and presentation style/accuracy	1	2		<b>3X</b>	
	Poorly written	Could be improved		Well written	
<b>Overall Recommendation</b>	1	2	3	<b>4X</b>	<b>5X</b>
	Strong reject	Weak reject	Weak accept	<b>Accept</b>	<b>Strong accept</b>

**Contributions**

Definition of a pervasive Service description framework

**Strengths and weaknesses**

Well written with clear contribution

**Detailed public comments**

Nothing to add. Well written!