RFIdentify: Speaker Presence Sensing

Blake Arnold, Willi Ballenthin
{baa2121,wrb2102}@columbia.edu

Internet Real-Time Lab, Columbia University
New York, NY 10027

Internet Real-Time Lab
Fall 2010

Computer Science
Columbia University
New York, New York 10027
URL: http://www.cs.columbia.edu/irt/

RFIdentify: Speaker Presence Sensing

Blake Arnold, Willi Ballenthin
{baa2121,wrb2102}@columbia.edu

Internet Real-Time Lab, Columbia University
New York, NY 10027

Columbia University

Fall 2010

Abstract

ABSTRACT HERE

1 Introduction

Location aware hardware is slowly gaining ground in the past few years. The hardware has continued to grow from Sonar to GPS to cellphone triangulation. The main motivation for this technology is ease of use from the user side. New services have been created to help third parties track users of such devices as means of recommendations or alerts.

This technology can be useful during a large conference with numerous speakers. Keeping track of which speakers are currently presenting is a daunting task. It requires constantly looking at a time and the speaker order while also keeping track of any changes to the speaker order.

In this paper, we show how location aware hardware can be used to allow better speaker recognition during a conference. Are main goal is to alert the attendees when new speakers start to present. This allows the attendee to determine when a speaker of interest begins his/her talk.

Past designs to create a speaker aware system have been different in the past.

2 Related Work

1. F8 Conference Facebook Presence for all attendees as well as speakers.
2. Marc Petit-Huguenin Original designer for microphone RFID system

3 Outline

Outline of the rest of the paper: "The remainder of the paper is organized as follows. In Section 2, we introduce ..Section 3 describes ... Finally, we describe future work in Section 5." [Note that Section is capitalized. Also, vary your expression between "section" being the subject of the sentence, as in "Section 2 discusses ..." and "In Section, we discuss ...".]

Body of paper

4 Problem

5 Approach

By using an RFID reader

5.1 Server

1. Dependencies

5.2 Client

1. Dependencies
2. Configure Handling
3. Avahi Loop
4. Reader Loop

6 Technologies

contains actual implementation details when implementing architecture isn't totally straightforward. Mention briefly implementation language, platform, location, dependencies on other packages and minimum resource usage if pertinent.

6.1 Server

1. Apache Server core implementation for handling client requests.
2. XMPP

6.2 Client

1. avahi/mDNS DESCRIPTION
2. pthreads
3. cURL DESCRIPTION

6.3 Hardware

1. DLP
2. FTDI/Big Reader

7 Evaluation

How does it really work in practice? Provide real or simulated performance metrics, end-user studies, mention external technology adoptors, if any, etc. Related work, if not done at the beginning

8 Summary and Future Work

often repeats the main result

9 Acknowledgements

10 Bibliography

http://www.facebook.com/presence/