

# **2011 Third International Workshop on Near Field Communication**

**(NFC 2011)**

**Hagenberg, Austria  
22 February 2011**



**IEEE Catalog Number: CFP1188F-PRT  
ISBN: 978-1-61284-176-2**

# 2011 Third International Workshop on Near Field Communication

## NFC 2011

### Table of Contents

Message from the NFC 2011 Workshop Chairs.....	vii
Reviewers.....	viii
NFC 2011 Steering Committee.....	ix
NFC 2011 Program Committee.....	xi

---

#### Invited Paper

NFC Mobiquitous Information Service Prototyping at the University of Nice Sophia Antipolis and Multi-mode NFC Application Proposal .....	3
<i>Serge Miranda and Nicolas Pastorelly</i>	

#### Applications, Services and Usability

RFID Based Applications in Culture, Media and Creative Industries .....	11
<i>Eileen Kuehn, Jens Reinhardt, Stephan Bergemann, and Juergen Sieck</i>	
Touch to Play – Exploring Touch-Based Mobile Interaction with Public Displays .....	15
<i>Gregor Broll, Roman Graebisch, Maximilian Scherr, Sebastian Boring, Paul Holleis, and Matthias Wagner</i>	
NFC Mobile Parlor Games Enabling Direct Player to Player Interaction .....	21
<i>Avinash Nandwani, Paul Coulton, and Reuben Edwards</i>	
inSERT – An NFC-based Self Reporting Questionnaire for Patients with Impaired Fine Motor Skills .....	26
<i>Andreas Prinz, Philipp Menschner, Matthias Altmann, and Jan Marco Leimeister</i>	
Use of NFC-based Pervasive Games for Encouraging Learning and Student Motivation .....	32
<i>Pilar Castro Garrido, Guillermo Matas Miraz, Irene Luque Ruiz, and Miguel Ángel Gómez-Nieto</i>	
An NFC Approach for Nursing Care Training .....	38
<i>Jesús Fontecha, Ramón Hervás, José Bravo, and Vladimir Villarreal</i>	
A Generic NFC-enabled Measurement System for Remote Monitoring and Control of Client-side Equipment .....	44
<i>Charl A. Opperman and Gerhard P. Hancke</i>	
Encrypted NFC Emergency Tags Based on the German Telematics Infrastructure .....	50
<i>Sebastian Dünnebeil, Felix Köbler, Philip Koene, Jan Marco Leimeister, and Helmut Krcmar</i>	

## **Hardware & Security**

Design of 13.56 MHz Smartcard Stickers with Ferrite for Payment and Authentication .....	59
<i>Michael Gebhart, Roland Neubauer, Michael Stark, and Dimitri Warnez</i>	
Security Vulnerabilities of the NDEF Signature Record Type .....	65
<i>Michael Roland, Josef Langer, and Josef Scharinger</i>	
Investigations to Achieve Very High Data Rates for Proximity Coupling Devices at 13.56 MHz and NFC Applications .....	71
<i>Martin Gossar, Michael Stark, Michael Gebhart, Wolfgang Pribyl, and Peter Söser</i>	
Practical Attacks on NFC Enabled Cell Phones .....	77
<i>Roel Verdult and François Kooman</i>	
<b>Author Index</b> .....	<b>83</b>