

2016 Ninth International Conference on Mobile Computing and Ubiquitous Networking (ICMU 2016)

**Kaiserslautern, Germany
4-6 October 2016**



**IEEE Catalog Number: CFP16YAT-POD
ISBN: 978-1-5090-1742-3**

**Copyright © 2016, Information Processing Society of Japan (IPSJ)
All Rights Reserved**

******This publication is a representation of what appears in the IEEE
Digital Libraries. Some format issues inherent in the e-media version may
also appear in this print version.***

IEEE Catalog Number:	CFP16YAT-POD
ISBN (Print-On-Demand):	978-1-5090-1742-3
ISBN (Online):	978-4-9076-2630-3

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Program

2016 Ninth International Conference on Mobile Computing and Ubiquitous Networking (ICMU)

Radio and Wireless Technology

A Basic Analysis of Medium Access Control for Full-duplex WLAN

Makoto Kobayashi (Osaka University, Japan), Md. Abdul Alim (Osaka University & Faculty Member, Electronics and Communication Engineering Discipline, Khulna University, Japan), Shunsuke Saruwatari (Osaka University, Japan), Takashi Watanabe (Osaka University, Japan) 1

Adaptive Load Balancing for 60GHz Wireless LAN with RoF-based Distributed Antennas

Susumu Ishihara (Shizuoka University, Japan), Kodai Murakami (Shizuoka University, Japan), Hiroki Kushida (Shizuoka University, Japan), Mineo Takai (University of California, Los Angeles & Osaka University, USA), Hiroshi Mano (Koden Techno Info KK & EverySense Inc, Japan) 7

Design of WiFi-AP Operating Channel Estimation Scheme for Sensor Node

Shigemi Ishida (Kyushu University, Japan), Yosuke Kunihiro (Kyushu University, Japan), Kousaku Izumi (Kyushu University, Japan), Shigeaki Tagashira (Kansai University, Japan), Akira Fukuda (Kyushu University, Japan) 13

Wearable Sensors

An Eye Movement Study on Scientific Papers Using Wearable Eye Tracking Technology

Seyyed Saleh Mozaffari Chanjani (University of Kaiserslautern & German Research Center for Artificial Intelligence, Germany), Mohammad Al-Naser (University of Kaiserslautern, German Research Center for Artificial Intelligence, Germany), Syed Saqib Bukhari (University of Kaiserslautern, German Research Center for Artificial Intelligence, Germany), Damian Borth (DFKI, Germany), Shanley Allen (University of Kaiserslautern, Germany), Andreas Dengel (Deutsche Forschungszentrum für Künstliche Intelligenz GmbH, Germany) 19

Player Identification by Motion Features in Sport Videos Using Wearable Sensors

Takashi Hamatani (Osaka University, Japan), Yudai Sakaguchi (Osaka University, Japan), Akira Uchiyama (Osaka University, Japan), Teruo Higashino (Osaka University, Japan) 25

SenStick: A Rapid Prototyping Platform for Sensorizing Things

Yugo Nakamura (Nara Institute of Science and Technology, Japan), Yutaka Arakawa (Nara Institute of Science and Technology & NAIST, Japan), Keiichi Yasumoto (Nara Institute of Science and Technology, Japan) 31

Novel Mobile Interactions and Social Computing

HappyInu: Exploring how to use games and extrinsic rewards for consistent food tracking behavior

Edith Luhanga (Nara Institute of Science and Technology, Japan), Akpro Elder Hippocrate Akpa (Nara Institute of Science and Technology, Japan), Hirohiko Suwa (Nara Institute of Science and Technology, Japan), Yutaka Arakawa (Nara Institute of Science and Technology & NAIST, Japan), Keiichi Yasumoto (Nara Institute of Science and Technology, Japan) 37

WaistonBelt 2: A Belt-type Wearable Device for Monitoring Abdominal Circumference, Posture and Activity

Yuki Matsuda (Nara Institute of Science and Technology, Japan), Takashi Hasegawa (Tokyo Medical and Dental University, Japan), Ismail Arai (Nara Institute of Science and Technology, Japan), Yutaka Arakawa (Nara Institute of Science and Technology & NAIST, Japan), Keiichi Yasumoto (Nara Institute of Science and Technology, Japan) 44

<i>Multi-label Categorizing Local Event Information from Micro-blogs</i>	
Wataru Yamada (NTT Docomo, Japan), Haruka Kikuchi (NTT DOCOMO, Japan), Keiichi Ochiai (NTT DOCOMO, Japan), Shu Takahashi (NTT DOCOMO, Japan), Yusuke Fukazawa (NTT DOCOMO, Inc., Japan), Hiroshi Inamura (Future University Hakodate, Japan), Ken Ohta (NTT DOCOMO, INC., Japan)	50

Mobile Network and Security

<i>In-Network Guidance Activated with Overhearing for Mobile Wireless Multi-hop Networks</i>	
Keisuke Koyama (Kansai University, Japan), Kento Ikkaku (Kansai University, Japan), Miki Yamamoto (Kansai University, Japan)	56
<i>Proxy Cooperative Awareness Message: An Infrastructure-Assisted V2V Messaging</i>	
Tomoya Kitazato (The University of Tokyo, Japan), Manabu Tsukada (the Univerrrsity of Tokyo, Japan), Hideya Ochiai (The University of Tokyo, Japan), Hiroshi Esaki (The University of Tokyo, Japan)	62
<i>Proposal for Secure Group Communication using Encryption Technology</i>	
Shinya Tanada (Meijo University, Japan), Hidekazu Suzuki (Meijo University, Japan), Katsuhiro Naito (Aichi Institute of Technology, Japan), Akira Watanabe (Meijo University, Japan)	68

Mobility Matters

<i>Multi-Algorithm On-Site Evaluation System for PDR Challenge</i>	
Katsuhiko Kaji (Aichi Institute of Technology, Japan), Kohei Kanagu (Ritsumeikan University, Japan), Kazuya Murao (Ritsumeikan University, Japan), Nobuhiko Nishio (Ritsumeikan University, Japan), Kenta Urano (Nagoya University, Japan), Hirokazu Iida (Nagoya University, Japan), Nobuo Kawaguchi (Nagoya University, Japan)	74
<i>Measurement Methods of Spatial Ability using a Virtual Reality System</i>	
Kosuke Shimada (Graduate School of Engineering Nagoya University, Japan), Kei Hiroi (Nagoya University, Japan), Nobuo Kawaguchi (Nagoya University, Japan), Katsuhiko Kaji (Aichi Institute of Technology, Japan)	80
<i>RecurChat: BLE-based Message Forwarding System with On-Site Application Distribution</i>	
Manato Fujimoto (Nara Institute of Science and Technology, Japan), Seigi Matsumoto (Nara Institute of Science and Technology, Japan), Yutaka Arakawa (Nara Institute of Science and Technology & NAIST, Japan), Keiichi Yasumoto (Nara Institute of Science and Technology, Japan)	86