



AMBIENT 2020

The Tenth International Conference on Ambient Computing, Applications,
Services and Technologies

October 25 - 29, 2020

AMBIENT 2020 Editors

Oana Dini, IARIA, EU/USA

Navid Shaghghi, Santa Clara University, USA

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2020) by International Academy, Research, and Industry Association (IARIA)
Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2020)

International Academy, Research, and Industry Association (IARIA)
412 Derby Way
Wilmington, DE 19810

Phone: (408) 893-6407
Fax: (408) 527-6351

petre@iaria.org

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
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

| | |
|---|----|
| BOxy: A Cost-Effective Blood Oximeter <i>Beau Hsia, Derrick Wang, Navid Shaghaghi, and Zhiwen Zhang</i> | 1 |
| GluMo: A Noninvasive Blood Glucose Monitor <i>Ben Tan, Peter Ferguson, Teddy Nguyen, Hannah Albright, Navid Shaghaghi, and Zhiwen Zhang</i> | 5 |
| A Systematic Review of Ambient Display Modalities, Physical Forms and Interactivity <i>Ben Shelton and Keith Nesbitt</i> | 9 |
| Social Interactions of Artificial Ventilated Patients in Intensive Care – an Example of a Monitoring System <i>Jan Hendrik Rohl, Alexander Gerka, Rebecca Diekmann, and Andreas Hein</i> | 16 |
| Effects of Indoor Environmental Quality on Concentration <i>Salla Muuraiskangas, Heidi Simila, Johanna Kallio, Pauli Rasanen, and Kaisa Vehmas</i> | 22 |