

2015 1st International Workshop on Exploring Component-based Techniques for Constructing Reference Architectures (CobRA 2015)

**Montreal, Quebec, Canada
4-8 May 2015**



**IEEE Catalog Number: CFP15G78-POD
ISBN: 978-1-5090-1462-0**

**Copyright © 2015, Association for Computing Machinery
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:	CFP15G78-POD
ISBN (Print-On-Demand):	978-1-5090-1462-0
ISBN (Online):	978-1-4503-3445-7

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

Table of Contents

CompArch 2015 Organization	vi
---	-----------

CobRA 2015 Workshop Organization	viii
---	-------------

Chairs' Introduction, Invited Talk, Paper

Session Chair: Elisa Yumi Nakagawa (*University of São Paulo*)

• (Reference) Architecture = Components + Composition (+ Variation Points).....	1
Kung-Kiu Lau, Simone Di Cola (<i>The University of Manchester</i>)	
• Software Reference Architectures: Related Architectural Concepts and Challenges.....	5
Matthias Galster (<i>University of Canterbury</i>)	
• Do Reference Architectures can Contribute to Standardizing Variability Management Tools?	9
Edson Oliveira Jr, Ana P. Allian (<i>State University of Maringá</i>)	

Papers

Session Chair: Kung-Kiu Lau (*University of Manchester*)

• An Analysis of Reference Architectures for the Internet of Things	13
Everton Cavalcante (<i>Federal University of Rio Grande do Norte & Université de Bretagne-Sud</i>), Marcelo Pitanga Alves (<i>Federal University of Rio de Janeiro</i>), Thais Batista (<i>Federal University of Rio Grande do Norte</i>), Flavia C. Delicato, Paulo F. Pires (<i>Federal University of Rio de Janeiro</i>)	
• Towards a Formal Description of Reference Architectures for Embedded Systems.....	17
Milena Guessi, Lucas B. R. Oliveira (<i>University of São Paulo & University of South Brittany</i>), Lina Garcés (<i>University of São Paulo</i>), Flavio Oquendo (<i>University of South Brittany</i>)	
• On the Equivalence between Reference Architectures and Metamodels	21
Valdemar V. Graciano Neto (<i>Universidade Federal de Goiás</i>), Lina Garcés, Milena Guessi, Lucas Bueno R. de Oliveira (<i>University of São Paulo</i>), Flavio Oquendo (<i>Université de Bretagne Sud</i>)	

Author Index.....	25
--------------------------	-----------