2018 4th International Workshop on Requirements Engineering for Self-Adaptive, Collaborative, and Cyber Physical Systems (RESACS 2018)

Banff, Alberta, Canada 20 August 2018



IEEE Catalog Number: ISBN: CFP18R74-POD 978-1-5386-8411-5

Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

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

IEEE Catalog Number:	CFP18R74-POD
ISBN (Print-On-Demand):	978-1-5386-8411-5
ISBN (Online):	978-1-5386-8410-8

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



2018 4th International Workshop on Requirements Engineering for Self-Adaptive, Collaborative, and Cyber Physical Systems **RESACS 2018**

Table of Contents

Welcome Message from the Organizers	
RESACS 2018: 4th International Workshop on Requirements Engineering for Self-Adaptive, Collaborative, and Cyber Physical Systems	
Deriving Functional Safety Requirements Using Undesired Combination State Templates	
Non-functional Requirements Trade-Off in Self-Adaptive Systems	
A Requirements-Based Approach for the Evaluation of Emulated IoT Systems	
ReqVision: Digitising Your Analog Notes into Readable and Editable Data	
Requirements for a Flexible and Generic API Enabling Mobile Crowdsensing mHealth Applications	
 AirborneCPS: A Simulator for Functional Dependencies in Cyber Physical Systems: A Traffic Collision Avoidance System Implementation	

A Knowledge Acquisition Approach for Off-Nominal Behaviors .36	
Kaushik Madala (University of North Texas), Hyunsook Do (University of	
North Texas), and Daniel Aceituna (DISTek Integration, Inc.)	

Towards Context-Aware Process Guidance in Cyber-Physical Systems with Augmented Reality .44...... Klaus Kammerer (Ulm University, Germany), Rüdiger Pryss (Ulm University, Germany), Kevin Sommer (Uhlmann Pac-Systeme GmbH & Co. KG, Laupheim, Germany), and Manfred Reichert (Ulm University, Germany)