2022 Workshop on Benchmarking Cyber-Physical Systems and Internet of Things (CPS-IoTBench 2022)

Virtual Workshop 3 May 2022



IEEE Catalog Number: ISBN:

CFP22CG5-POD 978-1-6654-7039-1

Copyright © 2022 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:
 CFP22CG5-POD

 ISBN (Print-On-Demand):
 978-1-6654-7039-1

 ISBN (Online):
 978-1-6654-7038-4

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



2022 Workshop on Benchmarking Cyber-Physical Systems and Internet of Things (CPS-IoTBench)

CPS-IoTBench 2022

Table of Contents

Welcome Message from the CPS-IoTBench 2022 Organizers Committee Members	
Session 1	
Regression Model Trees: Compact Energy Models for Complex IoT Devices	1
Benchmarking Audio-Based Deep Learning Models for Detection and Identification of Unmanned Aerial Vehicles	7
Benchmarking Performance of Ethereum Blockchain on Resource Constrained Devices	. 12
Session 2	
Reproducing Key Results from "Restructuring Endpoint Congestion Control"	17

Signal Loss in Body Coupled Communication: Guide for Accurate Measurements
On the Performance of IEEE 802.15.4z-Compliant Ultra-Wideband Devices
First Steps in Benchmarking the Performance of Heterogeneous Ultra-Wideband Platforms
Author Index 41