

2021 IEEE 28th International Conference on High Performance Computing, Data and Analytics Workshop (HiPCW 2021)

**Bengaluru, India
17-20 December 2021**



**IEEE Catalog Number: CFP21E51-POD
ISBN: 978-1-6654-1038-0**

**Copyright © 2021 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:	CFP21E51-POD
ISBN (Print-On-Demand):	978-1-6654-1038-0
ISBN (Online):	978-1-6654-1037-3

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

2021 IEEE 28th International Conference on High Performance Computing, Data, and Analytics Workshop (HiPCW) **HiPCW 2021**

Table of Contents

Message from the HiPC 2021 General Co-chairs

Workshop 1: Education for High Performance Computing (EduHiPC 2021)

EduHiPC 2021 Introduction file	1
<i>Sheikh Ghafour (Tennessee Tech University) and Sushil K. Prasad (University of Texas, San Antonio)</i>	
EduHiPC 2021 Keynote Talk	3
<i>Charles Weems (University of Massachusetts)</i>	
Teaching Parallel and Distributed Computing Concepts Using OpenMPI and Java	4
<i>Joel Adams (Calvin University, USA)</i>	
Broad Awareness of Unseen Work on a Concurrency-Based Assignment	12
<i>Prasun Dewan (University of North Carolina), Samuel George (University of North Carolina), Bowen Gu (University of North Carolina), Zhizhou Liu (University of North Carolina), Hao Wang (University of North Carolina), and Andrew Wortas (University of North Carolina)</i>	
Teaching High Productivity and High Performance in an Introductory Parallel Programming Course	21
<i>Vivek Kumar (IIIT Delhi)</i>	
HPC@SCALE: A Hands-on Approach for Training Next-Gen HPC Software Architects	29
<i>Tanzima Islam (Texas State University) and Chase Phelps (Texas State University)</i>	
Online Learning Platform for Application-Inspired Cloud and DevOps Curriculum	35
<i>Songjie Wang (University of Missouri-Columbia), Roshan Neupane (University of Missouri-Columbia), Ashish Pandey (University of Missouri-Columbia), Xiyao Cheng (University of Missouri-Columbia), and Prasad Calyam (University of Missouri-Columbia)</i>	
We Need Community Effort to Achieve PDC Adoption!	43
<i>Erik Saule (UNC Charlotte), Kalpathi Subramanian (UNC Charlotte), and Jamie Payton (Temple University)</i>	

Workshop 2: Parallel Programming in the Exascale Era (PPEE 2021)

PPEE 2021 Introduction and Abstracts	50
<i>Vivek Kumar (Indraprastha Institute of Information Technology, India), Swarnendu Biswas (Indian Institute of Technology, Kanpur), and Vishwesh Jatala (Indian Institute of Technology, Bhilai)</i>	

Author Index	57
---------------------------	-----------