Copyright © 2025 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 may photocopy beyond the limits of US copyright law, for private use of patrons, those articles in this volume that carry a code at the bottom of the first page, provided that the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

Other copying, reprint, or republication requests should be addressed to: IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, P.O. Box 133, Piscataway, NJ 08855-1331.

The papers in this book comprise the proceedings of the meeting mentioned on the cover and title page. They reflect the authors' opinions and, in the interests of timely dissemination, are published as presented and without change. Their inclusion in this publication does not necessarily constitute endorsement by the editors, the IEEE Computer Society, or the Institute of Electrical and Electronics Engineers, Inc.

ISBN-13: 979-8-3315-0213-3 ISSN: 2325-1301 BMS Part # CFP25066-ART

Additional copies may be ordered from:

IEEE Computer Society Customer Service Center 10662 Los Vaqueros Circle P.O. Box 3014 Los Alamitos, CA 90720-1314 Tel: + 1 800 272 6657 Fax: + 1 714 821 4641

Tel: + 1 800 272 6657 Fax: + 1 714 821 4641 http://computer.org/cspress csbooks@computer.org IEEE Service Center
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 08855-1331
Tel: + 1 732 981 0060
Fax: + 1 732 981 9667
http://shop.ieee.org/store/
customer-service@ieee.org

IEEE Computer Society
Asia/Pacific Office
Watanabe Bldg., 1-4-2
Minami-Aoyama
Minato-ku, Tokyo 107-0062
JAPAN
Tel: +81 3 3408 3118
Fax: +81 3 3408 3553
tokyo.ofc@computer.org

Individual paper REPRINTS may be ordered at: <reprints@computer.org>

Editorial production by Joann Wu Cover art production by Hector Torres Printed in the United States of America by





IEEE Computer Society
Conference Publishing Services (CPS)

http://www.computer.org/cps