PROGRESS IN BIOMEDICAL OPTICS AND IMAGING
Vol. 25 No. 51

Medical Imaging 2024

Computer-Aided Diagnosis

Weijie Chen
Susan M. Astley
Editors

19–22 February 2024
San Diego, California, United States

Sponsored by
SPIE

Cosponsored by
Siemens Healthineers (Germany)

Cooperating Organizations
American Association of Physicists in Medicine (United States)
Radiological Society of North America
World Molecular Imaging Society
Society for Imaging Informatics in Medicine (United States)
International Foundation for Computer Assisted Radiology and Surgery
Medical Image Perception Society (United States)

P*ublished by*
SPIE

Volume 12927

Proceedings of SPIE, 1605-7422, V. 12927

Medical Imaging 2024: Computer-Aided Diagnosis, edited by Weijie Chen,
Susan M. Astley, Proc. of SPIE Vol. 12927, 1292701 · © 2024
SPIE · 1605-7422 · doi: 10.1117/12.3031546

The papers in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. Additional papers and presentation recordings may be available online in the SPIE Digital Library at SPIEDigitalLibrary.org.

The papers reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from these proceedings:
Author(s), "Title of Paper," in *Medical Imaging 2024: Computer-Aided Diagnosis*, edited by Weijie Chen, Susan M. Astley, Proc. of SPIE 12927, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 1605-7422
ISSN: 2410-9045 (electronic)

ISBN: 9781510671584
ISBN: 9781510671591 (electronic)

Published by
SPIE
P.O. Box 10, Bellingham, Washington 98227-0010 USA
Telephone +1 360 676 3290 (Pacific Time)
SPIE.org

Printed in the United States of America by Curran Associates, Inc., under license from SPIE.

Publication of record for individual papers is online in the SPIE Digital Library.

SPIE. DIGITAL LIBRARY
SPIEDigitalLibrary.org

Paper Numbering: A unique citation identifier (CID) number is assigned to each article in the Proceedings of SPIE at the time of publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online and print versions of the publication. SPIE uses a seven-digit CID article numbering system structured as follows:

- The first five digits correspond to the SPIE volume number.
- The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B … 0Z, followed by 10-1Z, 20-2Z, etc. The CID Number appears on each page of the manuscript.

Contents

CLASSIFICATION AND PREDICTION

SEGMENTATION II

HEAD, NECK, AND EYE

RADIOMICS

LUNG AI

DEEP LEARNING II

POSTER SESSION: ABDOMINAL AND CARDIOVASCULAR

POSTER SESSION: BREAST

POSTER SESSION: DEEP LEARNING

POSTER SESSION: HEAD, NECK, AND EYE

POSTER SESSION: LUNG

DIGITAL POSTER SESSION

Conference Committee

Symposium Chairs

Despina Kontos, Penn Medicine (United States)
Joseph Y. Lo, Carl E. Ravin Advanced Imaging Labs. (United States)

Conference Chairs

Weijie Chen, U.S. Food and Drug Administration (United States)
Susan M. Astley, The University of Manchester (United Kingdom)

Conference Program Committee

Sameer K. Antani, U.S. National Library of Medicine (United States)
Samuel G. Armato III, The University of Chicago (United States)
Ulas Bagci, Northwestern University (United States)
Matthew S. Brown, UCLA Center for Computer Vision & Imaging Biomarkers (United States)
Kenny H. Cha, U.S. Food and Drug Administration (United States)
Heang-Ping Chan, University of Michigan (United States)
Thomas M. Deserno, Technische Universität Braunschweig (Germany)
Karen Drukker, The University of Chicago (United States)
Jan Ehrhardt, Universität zu Lübeck (Germany)
Catalin Fetita, Télécom SudParis (France)
Aimilia Gastounioti, Penn Medicine (United States)
Maryellen L. Giger, The University of Chicago (United States)
Hayit Greenspan, Tel Aviv University (Israel)
Lubomir M. Hadjiiski, University of Michigan (United States)
Horst K. Hahn, Fraunhofer MEVIS (Germany) and Jacobs University Bremen (Germany)
Takeshi Hara, Gifu University School of Medicine (Japan)
Anja B. Hennemuth, Fraunhofer-Institut für Digitale Medizin MEVIS (Germany)
Helen Hong, Seoul Women's University (Korea, Republic of)
Khan M. Iftekharuddin, Old Dominion University (United States)
JongHyo Kim, Seoul National University Hospital (Korea, Republic of)
Despina Kontos, Columbia University Irving Medical Center (United States)
Juhun Lee, University of Pittsburgh (United States)
Zhengrong Jerome Liang, Stony Brook University (United States)
Marius George Linguraru, Children's National Medical Center (United States)
Hongbing Lu, PLA Air Force Military Medical University (China)
Maciej A. Mazurowski, Duke University (United States)

Fabrice Meriaudeau, Université de Bourgogne (France)
Kensaku Mori, Nagoya University (Japan)
Chisako Muramatsu, Shiga University (Japan)
Janne J. Näppi, Massachusetts General Hospital (United States) and Harvard Medical School (United States)
Carol L. Novak, Siemens Healthineers (United States)
Nicholas A. Petrick, U.S. Food and Drug Administration (United States)
Antonio R. Porras, Children's National Health System (United States)
Prateek Prasanna, Stony Brook University (United States)
Letícia Rittner, University of Campinas (Brazil)
Ravi K. Samala, U.S. Food and Drug Administration (United States)
Clarisa I. Sánchez-Gutiérrez, University of Amsterdam (Netherlands)
Amber L. Simpson, Queen's University (Canada)
Ronald M. Summers, National Institutes of Health Clinical Center (United States)
Kenji Suzuki, Tokyo Institute of Technology (Japan)
Jonas Teuwen, Netherlands Cancer Institute (Netherlands) and Radboud University Medical Center (Netherlands)
Pallavi Tiwari, University of Wisconsin-Madison (United States)
Heather M. Whitney, The University of Chicago (United States)
Matthias Wilms, University of Calgary (Canada)
Axel Wismüller, University of Rochester Medical Center (United States)
Shandong Wu, University of Pittsburgh (United States)
Xiaofeng Yang, Emory University School of Medicine (United States)
Hiroyuki Yoshida, Massachusetts General Hospital (United States) and Harvard Medical School (United States)
Chuan Zhou, Michigan Medicine (United States)