Medical Imaging De-Identification (MIDI) Workshop Agenda

The Medical Imaging De-Identification workshop is being offered to examine the state of the science for the de-identification of publicly released medical images. The primary emphasis is on medical images with accompanying data elements, especially those encoded in formats in which the data elements are embedded, particularly DICOM. The sessions described below make up the workshop.

Please register here.

- DAY 1, May 22, 2023 (10:00 am 2:00 pm EDT)
 - Welcome and Opening Comments
 - Session 1: Report of the MIDI Task Group Best Practices and Recommendations
 - Session 2: Tools for Conventional Approaches to De-Identification
 - O Break 11:50 am 12:00 pm
 - Session 3: International Approaches to De-Identification
 - Session 4: Industry Panel on Image De-Identification
 - Day 1 Closing Remarks
- DAY 2, May 23, 2023 (10:00 am 2:00 pm EDT)
 - Welcome and Recap
 - O Session 5: Pathology Whole Slide Image De-Identification
 - Session 6: De-facing
 - Break 11:50 am 12:00 pm
 - Session 7: The Role of Al in Image De-Identification
 - Session 8: NCI MIDI Datasets and Pipeline
 - Closing Remarks

DAY 1, May 22, 2023 (10:00 am - 2:00 pm EDT)

Welcome and Opening Comments

10:00 am - 10:10 am EDT

Keyvan Farahani, PhD, National Heart, Lung, and Blood Institute & National Cancer Institute, National Institutes of Health

Session 1: Report of the MIDI Task Group - Best Practices and Recommendations

10:10 am - 11:00 am EDT

In this session, David Clunie, chair of the MIDI Task Group, will summarize the best practices and recommendations included in the task group's report, recently available in pre-print, followed by a question and answer period.

Session Chair: David Clunie, MBBS, PixelMed

10:10 am - 10:50 am David Clunie, MBBS, PixelMed

Summary of the MIDI Task Group Report

10:50 am - 11:00 am Discussion

Session 2: Tools for Conventional Approaches to De-Identification

11:00 am - 11:50 pm EDT

In this session, speakers will share methods currently in use for medical de-identification.

Session Chair: Fred Prior, PhD, University of Arkansas for Medical Sciences

11:00 am - 11:10 am Fred Prior, PhD, University of Arkansas for Medical Sciences

Setting the Stage

11:10 am - 11:20 am Michael Rutherford, MS, University of Arkansas for Medical Sciences

The Tools of TCIA: Standardizing Zero-Tolerance De-identification

11:20 am - 11:30 am Stephen Moore, MS, Washington University School of Medicine in St. Louis

XNAT Platform: Image De-identification

11:30 am - 11:50 am Panel Discussion

Break 11:50 am - 12:00 pm

Session 3: International Approaches to De-Identification

12:00 pm - 12:40 pm EDT

This session will focus on requirements for de-identification outside of the United States.

Session chair: William Parker, MD, University of British Columbia

12:00 pm - 12:10 pm William Parker, MD, University of British Columbia

12:10 pm - 12:20 pm Haridimos Kondylakis, PhD, Institute of Computer Science, Foundation of Research & Technology (FORTH)

Data Infrastructures for AI in Medical Imaging: A report on the experiences of five EU projects

12:20 pm - 12:30 pm Christian Ludwigs, MSc, Aigora GmbH

Legal Framework and Best Practices for Medical Image De-Identification in the EU

12:30 pm - 12:40 pm Discussion

Session 4: Industry Panel on Image De-Identification

12:40 pm - 1:50 pm EDT

This session, largely a panel discussion, will feature flash presentations by industry groups and discuss their innovative approaches to image deidentification.

Session chair: Juergen Klenk, PhD, Deloitte Consulting

Panelists:

- Abraham Gutman, MS, AG Mednet
 Advances in Medical Imaging De-Identification and the Impact of Regulatory Constraints
- Dan Marcus, PhD, Flywheel
 The Flywheel Platform for Intelligent Image Anonymization
- Bob Lou, MD, Google Medical Imaging De-identification on Both Images and Text using AI Models
- Lawrence (Tony) O'Sullivan, MS, IBIS Optimizing and Automating Radiology
- Jiri Dobes, PhD, John Snow Labs

Day 1 Closing Remarks

1:50 pm - 2:00 pm EDT

David Clunie, MBBS, PixelMed

DAY 2, May 23, 2023 (10:00 am - 2:00 pm EDT)

Welcome and Recap

10:00 am - 10:10 am EDT

David Clunie, MBBS, PixelMed

Session 5: Pathology Whole Slide Image De-Identification

10:10 am - 11:00 am EDT

In this session, researchers will discuss pathology whole slide image de-identification.

Session chair: Adam Taylor, PhD, Sage Bionetworks

10:10 am - 10:20 am Adam Taylor, PhD, Sage Bionetworks

10:20 am - 10:30 am Tom Bisson, PhD, Charité Universitätsmedizin Berlin

Anonymization of Whole Slide Images in in Histopathology for Research and Education

10:30 am - 10:40 am David Gutman, MD, PhD, Emory University

Image DePHI and the DSA: Open Source tools for Histology Image De-Identification

10:40 am - 11:00 am Panel Discussion

Session 6: De-facing

11:00 am - 12:00 pm EDT

This session will focus on balancing the risks of removing potentially reconstructable facial information in head and neck cross-sectional images, also called de-facing, with the diminished utility of these images caused by restricted access to them.

Session chair: Ying Xiao, PhD, Hospital of the University of Pennsylvania

11:00 am - 11:10 am Ying Xiao, PhD, University of Pennsylvania

11:10 am - 11:20 am Christopher Schwarz, PhD, Mayo Clinic

Face Recognition and De-Identification of Research Brain Images with mri_reface

11:20 am - 11:30 am Douglas Greve, PhD, MGH/Harvard

MIDEFACE: Minimally Invasive Defacing

11:30 am - 11:50 am Panel Discussion

Break 11:50 am - 12:00 pm

Session 7: The Role of AI in Image De-Identification

12:00 pm - 12:50 pm

In this session, researchers discuss the utility of AI algorithms in image de-identification.

Session chair: Judy Wawira Gichoya, MD, Emory University

12:00 pm - 12:10 pm Judy Wawira Gichoya, MD, Emory University

12:10 pm - 12:20 pm George Shih, MD, Weill Cornell Medical College

Pixel De-Identification Using AI

12:20 pm - 12:30 pm Adrienne Kline, MD, PhD, Northwestern University

PyLogik: An open-source resource for medical image de-identification

12:30 pm - 12:50 pm Panel Discussion

Session 8: NCI MIDI Datasets and Pipeline

12:50 pm - 1:50 pm

This session will present CBIIT/NCI Medical Image De-Identification Datasets and Pipeline

Session chair: Keyvan Farahani, PhD, National Heart, Lung, and Blood Institute & National Cancer Institute, National Institutes of Health

12:50 pm - 1:00 pm Keyvan Farahani, PhD

1:00 pm - 1:10 pm Fred Prior, PhD, University of Arkansas for Medical Sciences

Synthetic Data for De-Identification Testing The MIDI Datasets 1:10 pm - 1:20 pm Ben Kopchick, PhD, Deloitte Consulting

Building a cloud-based MIDI pipeline

1:20 pm - 1:50 pm Panel Discussion

Closing Remarks

1:50 pm - 2:00 pm EDT

David Clunie, MBBS, PixelMed

Keyvan Farahani, PhD, NHLBI & NCI, NIH