

Tytuł pracy: Open database of scintigraphy studies for scientific research

Autor: Mateusz Midura

Afiliacja: Division of Nuclear and Medical Electronics, Institute of Radioelectronics and Multimedia Technology, Faculty of Electronics and Information Technology, Warsaw University of Technology, ul. Nowowiejska 15/19, 00-665 Warszawa

Adres email: mateusz.midura.dokt@pw.edu.pl

Współautor, Afiliacja, adres email: Waldemar T. Smolik Division of Nuclear and Medical Electronics, Institute of Radioelectronics and Multimedia Technology, Faculty of Electronics and Information Technology, Warsaw University of Technology, ul. Nowowiejska 15/19, 00-665 Warszawa waldemar.smolik@pw.edu.pl

Damian Wanta Division of Nuclear and Medical Electronics, Institute of Radioelectronics and Multimedia Technology, Faculty of Electronics and Information Technology, Warsaw University of Technology, ul. Nowowiejska 15/19, 00-665 Warszawa damian.wanta@pw.edu.pl

Przemysław Wróblewski Division of Nuclear and Medical Electronics, Institute of Radioelectronics and Multimedia Technology, Faculty of Electronics and Information Technology, Warsaw University of Technology, ul. Nowowiejska 15/19, 00-665 Warszawa przemyslaw.wroblewski@pw.edu.pl

Mikhail Ivanenko Division of Nuclear and Medical Electronics, Institute of Radioelectronics and Multimedia Technology, Faculty of Electronics and Information Technology, Warsaw University of Technology, ul. Nowowiejska 15/19, 00-665 Warszawa mikhail.ivanenko.dokt@pw.edu.pl

Autor prezentujący: Mateusz Midura

Telefon kontaktowy: +48668037680

Afiliacja: The development of new image processing methods, including automatic methods for the analysis of medical diagnostic images, requires the collection of large sets of sample tests. Machine learning methods, or so-called artificial intelligence, are based on experience and knowledge gathered in large datasets. Databases of computed tomography or magnetic resonance imaging examinations are publicly available. Unfortunately, there is no sufficiently large open database of scintigraphic imaging tests, including SPECT and PET tomography. The aim of the work is to create an open database of anonymized scintigraphy studies in the DICOM format. The idea behind the DICOM standard was to make exchanging image data between various image analysis systems straightforward. The open scintigraphy database is related to the concept of open science and research. The work analyzes technical aspects of the database. The medical metadata required in such a reference database is discussed in the context of the DICOM NM Information Object Definition attributes. Legal and ethical obstacles are discussed as well.

Obraz uzupełniający: [Przesłany plik](#)