

Name: EMBED

Information: Stands for EMory BrEast imaging Dataset. This dataset contains 3,383,659 screening and diagnostic mammogram images from 115,910 patients. Among these, 20% of the total 2D and C-view dataset is available for research use.

Can be used for: Breast_Cancer_Detection, Breast_Cancer_Risk_Prediction, Mammographic_Report_Generation, Breast_Cancer_Type_Classification, Breast_Tumor_Classification, Tumor_Localization, Breast_Density_Estimation, Synthetic_Data_Generation

Data Availability: Available upon signing agreement.

Data Link: Available at <https://aws.amazon.com/marketplace/pp/prodview-unw4li5rkivs2#overview>

Associated Article: [The EMory BrEast imaging Dataset \(EMBED\): A RaciallyDiverse, Granular Dataset of 3.4 Million Screening andDiagnostic Mammographic Images](#)

Data/Article published on: 2023

Article available at: <https://pubs.rsna.org/doi/10.1148/ryai.220047>

Types of data in dataset: Mammogram_Images

Types of files in dataset: dcm

Data collected from: USA

Name: DREAM

Information: Stands for Dialogue on Reverse Engineering Assessment and Methods. This dataset contains 144,231 screening mammograms from 85,580 women from the United States and 166,578 screening mammograms from 68,008 women from Sweden.

Can be used for: Breast_Cancer_Detection, Breast_Tumor_Classification

Data Availability: Not Accessible

Data Link: Only metadata available at <https://www.synapse.org/Synapse:syn1918762>

Associated Article: [Evaluation of Combined Artificial Intelligence and Radiologist Assessment to Interpret Screening Mammograms](#)

Data/Article published on: 2020

Article available at: <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2761795>

Types of data in dataset: Mammogram_Images

Types of files in dataset: csv

Data collected from: USA, Sweden

Name: DDSM

Information: Stands for Digital Database for Screening Mammography. The dataset contains 2620 scanned film mammograms (images), 339 images with abnormalities, 373 normal cases, 223 cancer cases.

Can be used for: Breast_Cancer_Detection, Lesion_Localization

Data Availability: Accessible

Data Link: Available at <http://www.eng.usf.edu/cvprg/Mammography/Database.html> and a mini version is available at <https://www.kaggle.com/datasets/skooch/ddsm-mammography>

Associated Article: [Current Status of the Digital Database for Screening Mammography](#)

Data/Article published on: 1998

Article available at: https://link.springer.com/chapter/10.1007/978-94-011-5318-8_75

Types of data in dataset: Mammogram_Images, Metadata

Types of files in dataset: lcs, Overlay, Ljpeg

Data collected from: USA

Name: CBIS-DDSM

Information: Stands for Curated Breast Imaging Sub-set of the Digital Database for Screening Mammography. It's an updated version of DDSM. This dataset contains 2620 scanned film mammograms converted into dicom images making a total of 10,239 images.

Derived from: DDSM

Can be used for: Breast_Cancer_Detection, Breast_Tumor_Classification, Image_Segmentation, Mammographic_Report_Generation, Multi_Modal_Learning, Synthetic_Data_Generation

Data Availability: Accessible

Data Link: Available at <https://www.cancerimagingarchive.net/collection/cbis-ddsm/>

Associated Article: [A curated mammography data set for use in computer-aided detection and diagnosis research](#)

Data/Article published on: 2017

Article available at: <https://www.nature.com/articles/sdata2017177>

Types of data in dataset: Mammogram_Images, Radiomic_Features

Types of files in dataset: dcm, csv

Data collected from: USA

Name: RBIS-DDSM

Information: Stands for Re-curated Breast Imaging Subset of the Digital Database for Screening Mammography. It's an updated, extended, and standardized version of CBIS-DDSM. It contains 849 mammogram images.

Derived from: CBIS-DDSM

Can be used for: Breast_Cancer_Detection, Breast_Tumor_Classification, Image_Segmentation, Mammographic_Report_Generation, Multi_Modal_Learning, Synthetic_Data_Generation

Data Availability: Accessible

Data Link: Available at

<https://ieee-dataport.org/documents/re-curated-breast-imaging-subset-ddsm-dataset-rbis-ddsm>

Associated Article: No associated paper

Types of data in dataset: Mammogram_Images, Radiomic_Features

Types of files in dataset: dcm, csv

Data collected from: USA

Name: OMI-DB

Information: Stands for Oncology Medical Image DataBase. This dataset contains 34,104 2D mammography images from 2,623 individuals.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [The oncology medical image database \(OMI-DB\)](#)

Data/Article published on: 2014

Article available at:

<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/9039/1/The-oncology-medical-image-database-OMI-DB/10.1117/12.2041674.short>

Types of data in dataset: Mammogram_Images

Types of files in dataset: dcm

Data collected from: UK

Name: OPTIMAM

Information: The dataset is an extended version of OMI-DB. This dataset contains 3,072,878 images from 172,282 women. The data has 4 classes namely "Normal", "Interval Cancer", "Benign", and

"Malignant". Of the 7661 screen-detected cancers from episodes with digital images, 5097 have been marked (67% of cancers).

Derived from: OMI-DB

Can be used for: Breast_Cancer_Detection, Breast_Cancer_Risk_Prediction, Breast_Cancer_Type_Classification, Synthetic_Data_Generation, Tumor_Localization

Data Availability: Available upon signing agreement.

Data Link: Available at <https://medphys.royalsurrey.nhs.uk/omidb/>

Associated Article: [OPTIMAM Mammography Image Database: A Large-Scale Resource of Mammography Images and Clinical Data](#)

Data/Article published on: 2020

Article available at: <https://pubs.rsna.org/doi/full/10.1148/ryai.2020200103>

Types of data in dataset: Mammogram_Images, Clinical_Data

Types of files in dataset: dcm, csv

Data collected from: UK

Name: MIAS

Information: Stands for Mammographic Imaging Analysis Society. This database contains 332 images.

Can be used for: Breast_Cancer_Detection, Lesion_Localization, Breast_Cancer_Type_Classification

Data Availability: Accessible

Data Link: Available at <https://www.repository.cam.ac.uk/items/b6a97f0c-3b9b-40ad-8f18-3d121eef1459>

Associated Article: [The mammographic images analysis society digital mammogram database](#)

Data/Article published on: 1994

Article available at: <https://cir.nii.ac.jp/crid/1572261551129161728>

Types of data in dataset: Mammogram_Images, Metadata

Types of files in dataset: pgm, tar, tz, txt

Data collected from: UK

Name: VinDr-Mammo

Information: The dataset contains 20000 images from 5000 exams (4-view), 241 of these findings are marked BIRADS 5, 995 of the findings are marked BIRADS 4, and 2254 of the findings are marked BIRADS 3.

Can be used for: Breast_Cancer_Detection, Breast_Cancer_Risk_Prediction, Mammographic_Report_Generation, Breast_Cancer_Type_Classification, Breast_Tumor_Classification, Tumor_Localization, Breast_Density_Estimation, Synthetic_Data_Generation, Anomaly_Detection, Multi_Modal_Learning

Data Availability: Available upon signing agreement but an Accessible version is available.

Data Link: Original version available at <https://www.physionet.org/content/vindr-mammo/1.0.0/> and the accessible version is available at

<https://www.kaggle.com/datasets/shantanughosh/vindr-mammogram-dataset-dicom-to-png>

Associated Article: [VinDr-Mammo: A large-scale benchmark dataset for computer-aided detection and diagnosis in full-field digital mammography](#)

Data/Article published on: 2022

Article available at: <https://www.physionet.org/content/vindr-mammo/1.0.0/>

Types of data in dataset: Mammogram_Images, Metadata

Types of files in dataset: dcm, png, csv

Data collected from: Vietnam

Name: RSNA

Information: Stands for Royal Society of North America. The dataset contains 54713 image files (54706 in the training set), 1158 cancer images, 53548 non_cancer images, 11427 patients negative, 486 patients positive.

Can be used for: Breast_Cancer_Detection, Class_Balancing

Data Availability: Accessible

Data Link: Available at <https://www.kaggle.com/competitions/rsna-breast-cancer-detection/data>

Associated Article: No associated paper

Data/Article published on: 2022

Types of data in dataset: Mammogram_Images, Metadata

Types of files in dataset: dcm

Data collected from: USA, Australia

Name: CMMD

Information: Stands for Chinese MaMmography Database. This dataset contains 3,728 mammographies from 1,775 patients. Patients' molecular subtypes were included for 749 of these patients (1,498 mammographies). There are a total of 5202 images.

Can be used for: Mammographic_Report_Generation, Breast_Cancer_Detection, Image_Segmentation, Multi_Modal_Learning, Breast_Cancer_Type_Classification, Synthetic_Data_Generation

Data Availability: Accessible

Data Link: Available at <https://www.cancerimagingarchive.net/collection/cmmd/#citations>

Associated Article: [The Chinese Mammography Database \(CMMD\): An online mammography database with biopsy confirmed types for machine diagnosis of breast](#)

Data/Article published on: 2021

Article available at: <https://onlinelibrary.wiley.com/doi/full/10.1155/2019/2717454>

Types of data in dataset: Mammogram_Images, Clinical_Data

Types of files in dataset: dcm, xlsx

Data collected from: China

Name: Inbreast

Information: The dataset contains 115 cases (410 images), 90 women with 4 images, 25 women with 2 images (Masectomy).

Can be used for: Breast_Cancer_Detection, Lesion_Localization, Image_Segmentation, Breast_Density_Estimation, Synthetic_Data_Generation

Data Availability: Accessible

Data Link: Available at <https://www.kaggle.com/datasets/ramanathansp20/inbreast-dataset>

Associated Article: [INbreast: toward a full-field digital mammographic database](#)

Data/Article published on: 2012

Article available at:

https://www.sciencedirect.com/science/article/pii/S107663321100451X?casa_token=scHMLQAY4ZEAAA:AA:i2kUWh2XkGKwQTmJYNK6TGNZRg--dgywtj1WWtuB2-HKA-aL8lv4r6ct7FGTZchvKZvydD4ttw

Types of data in dataset: Mammogram_Images, Metadata

Types of files in dataset: dcm

Data collected from: Portugal

Name: BCS-DBT

Information: Contains Digital Breast Tomosynthesis (3D) Images. 22,032 reconstructed DBT volumes belonging to 5,610 studies from 5,060 patients. 5,129 normal studies, 280 studies where additional imaging was needed, 112 benign biopsied studies, 89 studies with cancer.

Can be used for: Breast_Cancer_Detection, Breast_Density_Estimation, Breast_Cancer_Type_Classification, Tumor_Localization, Multi_Modal_Learning, Synthetic_Data_Generation
Data Availability: Accessible
Data Link: Available at <https://www.cancerimagingarchive.net/collection/breast-cancer-screening-dbt/>
Associated Article: [Detection of masses and architectural distortions in digital breast tomosynthesis: a publicly available dataset of 5,060 patients and a deep learning model](#)
Data/Article published on: 2020
Article available at: <https://arxiv.org/abs/2011.07995>
Types of data in dataset: Mammogram_Images, Radiomic_Features, Metadata, Clinical_Data, Annotation_Box
Types of files in dataset: dcm, xlsx
Data collected from: USA

Name: KAU-BCMD

Information: Stands for King Abdulaziz University Breast Cancer Mammogram Dataset. First significant mammogram dataset from Saudi Arabia. 1416 cases each with 2 views of both breasts making a total of 5664 images. Also contains 205 ultrasound cases corresponding to a part of the mammogram cases, with 405 images as a total.

Can be used for: BIRADS_Category_Classification, Breast_Cancer_Detection, Tumor_Localization, Breast_Tumor_Classification

Data Availability: Accessible

Data Link: Available at

<https://www.kaggle.com/datasets/asmaasaad/king-abdulaziz-university-mammogram-dataset>

Associated Article: [King Abdulaziz University Breast Cancer Mammogram Dataset \(KAU-BCMD\)](#)

Data/Article published on: 2021

Article available at: <https://www.mdpi.com/2306-5729/6/11/111>

Types of data in dataset: Mammogram_Images, Metadata

Types of files in dataset: jpg, xlsx

Data collected from: Saudi Arabia

Name: DMID

Information: This dataset contains 510 images. Among them, 274 are abnormal images, including benign and malignant cases.

Can be used for: Breast_Cancer_Detection, BIRADS_Category_Classification, Mammographic_Report_Generation

Data Availability: Accessible

Data Link: Available at

https://figshare.com/articles/dataset/_b_Digital_mammography_Dataset_for_Breast_Cancer_Diagnosis_Research_DMID_b_DMID_rar/24522883

Associated Article: [Digital mammography dataset for breast cancer diagnosis research \(DMID\) with breast mass segmentation analysis](#)

Data/Article published on: 2024

Article available at: <https://link.springer.com/article/10.1007/s13534-023-00339-y>

Types of data in dataset: Mammogram_Images, Metadata, Radiology Reports

Types of files in dataset: dcm, xlsx, txt

Data collected from: India

Name: BancoWeb

Information: This dataset Contains 1400 images from 320 cases.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [Online Mammographic Images Database for Development and Comparison of CAD Schemes](#)

Data/Article published on: 2010

Article available at: <https://link.springer.com/article/10.1007/s10278-010-9297-2>

Types of data in dataset: Mammogram_Images

Types of files in dataset: tiff

Data collected from: Brazil

Name: Miracle DB

Information: This dataset contains 204 mammography images collected from 196 patients.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [A web-accessible mammographic image database dedicated to combined training and evaluation of radiologists and machines](#)

Data/Article published on: 2009

Article available at: <https://ieeexplore.ieee.org/abstract/document/5394465>

Types of data in dataset: Mammogram_Images

Types of files in dataset: tiff

Data collected from: Greece

Name: Nijmegen

Information: This dataset contains 40 images from 21 cases.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [A computerized system for detection and segmentation of clustered microcalcifications](#)

Data/Article published on: 1996

Article available at: <http://dspace.fcu.edu.tw/handle/2377/2738>

Types of data in dataset: Mammogram_Images

Types of files in dataset: tiff

Data collected from: Taiwan

Name: Malaga

Information: This dataset contains 320 images from 89 cases.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [Automatic mass segmentation in mammographic images](#)

Data/Article published on: 2008

Article available at: <https://dugi-doc.udg.edu/handle/10256/4909>

Types of data in dataset: Mammogram_Images

Types of files in dataset: dcm

Data collected from: Spain

Name: LLNL

Information: This dataset contains 198 images from 50 cases.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [Toward a standard reference database for computer-aided mammography](#)

Data/Article published on: 2008

Article available at:

<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/6915/1/Toward-a-standard-reference-database-for-computer-aided-mammography/10.1117/12.770325.short>

Types of data in dataset: Mammogram_Images

Types of files in dataset: lcs

Data collected from: USA

Name: Magic-5

Information: This dataset contains 3369 images from 967 cases.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [MAGIC-5: an Italian mammographic database of digitised images for research](#)

Data/Article published on: 2002

Article available at:

https://www.researchgate.net/profile/Roberto-Bellotti-3/publication/5320442_MAGIC-5_An_Italian_mammographic_database_of_digitised_images_for_research/links/09e4150a2b4d4393bd000000/MAGIC-5-An-Italian-mammographic-database-of-digitised-images-for-research.pdf

Types of data in dataset: Mammogram_Images

Types of files in dataset: dcm

Data collected from: Italy

Name: Mammogrid

Information: No information found.

Can be used for: Breast_Cancer_Detection

Data Availability: Not Accessible

Associated Article: [MammoGrid: a prototype distributed mammographic database for Europe](#)

Data/Article published on: 2007

Article available at:

https://www.sciencedirect.com/science/article/pii/S0009926007001651?casa_token=-E26snreQ0cAAAAA:-R0727xsBGX71Pb3SovXb13mLue-io3wqbE6FcBdRhQsNxCG1z0_5yDTD_Qgl-upkf1EQNpsNA

Types of data in dataset: Mammogram_Images

Types of files in dataset: dcm

Data collected from: UK, Italy, Switzerland