**Überblick Datensätze**

Thermalbilder von vergrabenen Landminen

Dataset of thermographic images for the detection of buried landmines

<https://www.sciencedirect.com/science/article/pii/S2352340923005437>

X-Raybilder von Knochenbrüchen

<https://www.nature.com/articles/s41597-023-02432-4>

literature review:

<https://www.sciencedirect.com/science/article/pii/S2665917423000594#da0010>

An annotated dataset of tongue images supporting geriatric disease diagnosis  
<https://www.sciencedirect.com/science/article/pii/S2352340920310477>

→ Unterscheidung krank bzw. nicht krank

Children’s dental panoramic radiographs dataset for caries segmentation and dental disease detection  
<https://www.nature.com/articles/s41597-023-02237-5>

→ spannend aber zu kleines image dataset

Visual pollution real images benchmark dataset on the public roads  
<https://www.sciencedirect.com/science/article/pii/S2352340923005917>

A dataset of COVID-19 x-ray chest images  
<https://www.sciencedirect.com/science/article/pii/S235234092300118X>

A benchmark dataset for binary segmentation and quantification of dust emissions from unsealed roads  
<https://www.nature.com/articles/s41597-022-01918-x>

**FracAtlas**

*https://www.nature.com/articles/s41597-023-02432-4*

**Does the dataset contain sufficient data points?**

-   717 Fractured X-Ray scans

-   3366 Non-fractured X-Ray scans

-   Hand 1538, Leg 2273, Hip 338, Shoulder 349, Mixed 398

-   Frontal 2503, lateral 1492, oblique 418

-   .csv with data for location (hand, leg, etc) and type of fracture (frontal, lateral, oblique)

**Does it provide a target variable?**

-   Boolean variable of the bone being broken or not

-   Additional targets for location and type of fracture

**Is there any previous / related work on the dataset?**

-   Didn’t find anything on THIS SPECIFIC DATASET, dataset published mid 2023, very new – in paper comparison to other, previous x-ray datasets

-   A lot of work on fracture detection in general – different machine learning models compared. Past literature suggested Support vector machines having the highest accuracy <https://www.sciencedirect.com/science/article/pii/S2665917423000594#da0010>

-   Past research on best practices, for e.g. edge detection, machine learning architectures etc.

-   Allows us to choose pre-processing, architecture etc. on a wide range of past research and use the new dataset for a big potential for a high accurary

**Is the problem statement practically and theoretically relevant? Does a research gap exist considering the problem statement?**

-   New dataset with high quality, properly locally labeled data allows better results

-   Deep learning models have a higher potential at classifying fractures correctly than humans (Quelle in Lesezeichen)

-   Cheap and fast way to support developing countries’ medical system

**Further notes**

-   X-Ray pictures suitable for convolutional neural networks