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References & Citations

Musculoskeletal Radiograph Classification · v1.0

Primary Dataset

Dataset	MURA v1.1 — Musculoskeletal Radiographs
Source	Stanford ML Group — Kaggle
Link	https://www.kaggle.com/datasets/cjinny/mura-v11
Classes	14 classes — 7 body regions × Normal/Abnormal
Size	~40,000 X-ray images (train + validation)
Task	Multi-class classification — body part + abnormality detection

References [1–20]

[1] **Fracture Classification Systems**
Marsh, J. L. et al. (2007).
Fracture and dislocation classification compendium - 2007. Journal of Orthopaedic Trauma, 21(10 Suppl), S1-133.
■ https://pubmed.ncbi.nlm.nih.gov/18277234/

[2] **Bone Anatomy and Fracture Patterns**
Standring, S. (2020).
Gray's Anatomy: The Anatomical Basis of Clinical Practice. 42nd Edition, Elsevier.
■ https://www.us.elsevierhealth.com/grays-anatomy-9780702077050.html

[3] **Fracture Healing and Complications**
Einhorn, T. A., & Gerstenfeld, L. C. (2015).
Fracture healing: mechanisms and interventions. Nature Reviews Rheumatology, 11(1), 45-54.
■ https://pubmed.ncbi.nlm.nih.gov/25266456/

[4]   **Hip Fractures - Clinical Guide**

Parker, M., & Johansen, A. (2006).

Hip fracture. BMJ, 333(7557), 27-30.

■ https://pubmed.ncbi.nlm.nih.gov/16825230/

[5]   **Wrist and Hand Fractures**

Chung, K. C., & Spilson, S. V. (2001).

The frequency and epidemiology of hand and forearm fractures in the United States. The Journal of Hand Surgery, 26(5), 908-915.

■ https://pubmed.ncbi.nlm.nih.gov/11561245/

[6]   **Pelvic Fractures and Management**

Young, J. W., & Burgess, A. R. (1987).

Radiologic management of pelvic ring fractures. Urban & Schwarzenberg.

■ https://pubmed.ncbi.nlm.nih.gov/3306445/

[7]   **Pediatric Bone Injuries**

Landin, L. A. (1983).

Fracture patterns in children. Acta Orthopaedica Scandinavica, Supplementum 202, 1-109.

■ https://pubmed.ncbi.nlm.nih.gov/6574687/

[8]   **Osteoporosis and Fragility Fractures**

Klotzbuecher, C. M. et al. (2000).

Patients with prior fractures have an increased risk of future fractures. Journal of Bone and Mineral Research, 15(4), 721-739.

■ https://pubmed.ncbi.nlm.nih.gov/10780864/

[9]   **Compartment Syndrome in Fractures**

Shadgan, B. et al. (2010).

Diagnostic techniques in acute compartment syndrome of the leg. Journal of Orthopaedic Trauma, 24(1), 50-57.

■ https://pubmed.ncbi.nlm.nih.gov/20035181/

[10]   **Non-Union and Delayed Union of Fractures**

Calori, G. M. et al. (2011).

Treatment of long bone non-unions with polytherapy. Injury, 42, S65-S69.

■ https://pubmed.ncbi.nlm.nih.gov/21752375/

[11]   **Open Fractures and Infection Risk**

Gustilo, R. B., & Anderson, J. T. (1976).

Prevention of infection in the treatment of 1,025 open fractures of long bones. The Journal of Bone and Joint Surgery, 58(4), 453-458.

■ https://pubmed.ncbi.nlm.nih.gov/773941/

[12] **Spinal Fractures**
Vaccaro, A. R. et al. (2013).
AOSpine thoracolumbar spine injury classification system. Spine, 38(23), 2028-2037.
■ https://pubmed.ncbi.nlm.nih.gov/23970107/

[13] **Fat Embolism Syndrome**
Mellor, A., & Soni, N. (2001).
Fat embolism. Anaesthesia, 56(2), 145-154.
■ https://pubmed.ncbi.nlm.nih.gov/11167474/

[14] **Bone Tumors vs Fractures Differential Diagnosis**
Murphey, M. D. et al. (1997).
Imaging of primary malignant musculoskeletal tumors. RadioGraphics, 17(6), 1407-1434.
■ https://pubmed.ncbi.nlm.nih.gov/9397454/

[15] **AO Foundation - Fracture and Dislocation Classification**
Müller, M. E. et al. (1990).
The Comprehensive Classification of Fractures of Long Bones. Springer-Verlag.
■ https://www.aofoundation.org/

[16] **WHO - Fracture Risk Assessment (FRAX)**
Kanis, J. A. et al. (2008).
FRAX and the assessment of fracture probability in men and women. Osteoporosis International, 19(4), 385-397.
■ https://pubmed.ncbi.nlm.nih.gov/18292978/

[17] **Pathological Fractures**
Sarahrudi, K. et al. (2006).
Comparison of tibial bone defect repair induced by different platelet-rich plasma formulations. American Journal of Sports Medicine, 34(9), 1506-1513.
■ https://pubmed.ncbi.nlm.nih.gov/16685097/

[18] **Stress Fractures**
Nattiv, A. et al. (2000).
The female athlete triad. Medicine & Science in Sports & Exercise, 32(2), 405-416.
■ https://pubmed.ncbi.nlm.nih.gov/10694126/

[19] **Avascular Necrosis Post-Fracture**
Mont, M. A., & Hungerford, D. S. (1995).
Non-traumatic avascular necrosis of the femoral head. The Journal of Bone and Joint Surgery, 77(3), 459-474.
■ https://pubmed.ncbi.nlm.nih.gov/7890797/

[20]   **MURA Dataset — Primary Dataset Used**

Rajpurkar, P. et al. — Stanford ML Group (2018).

MURA: Large Dataset for Abnormality Detection in Musculoskeletal Radiographs. MURA v1.1 on Kaggle.

■ https://www.kaggle.com/datasets/cjinny/mura-v11

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