

Antoine Pirrone, Marie Beurton-Aimar & Nicholas Journet, Self-supervised deep metric learning for ancient papyrus fragments retrieval.

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1. Introduction and context. - 2. Related works. - 3. Datasets: 3.1. The Hisfrag database; - 3.2. Pre-processing the Michigan [papyrus] database. - 4. Learning a similarity score using deep metric learning: 4.1. Global architecture; - 4.2. Testing different architectures; - 4.3. Batch constitution; - 4.4. Evaluation method. - 5. Baseline, with and without domain adaptation: 5.1. Baseline results; - 5.2. Using a model trained on another dataset. - 6. Self-supervised learning: 6.1. Estimating the quantity of mislabelings; - 6.2. Self-supervised learning versus domain adaptation; - 6.3. Exploring a more realistic use case. - 7. Conclusion and future works.

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