

# APPLICATION OF IMAGE-BASED PERSISTENCE HOMOLOGY DESCRIPTORS FOR CANCER DIAGNOSIS AND GRADING FROM HISTOPATHOLOGY IMAGES

*Author(s) Name(s)*

Author Affiliation(s)

## ABSTRACT

***Index Terms***— Histopathology, Cancer, Diagnosis, Grading, Persistence homology, Persistence images, Persistence landscapes

## 1. INTRODUCTION

Cancer diagnosis and grading is the process of determining the presence and extent of malignancy and is one of the primary criteria used in clinical practice to inform prognosis and plan the treatment of individual patients. However, achieving good reproducibility in grading most cancers remains one of the challenges in pathology practice.

## 2. METHODS

## 3. RESULTS

## 4. REFERENCES